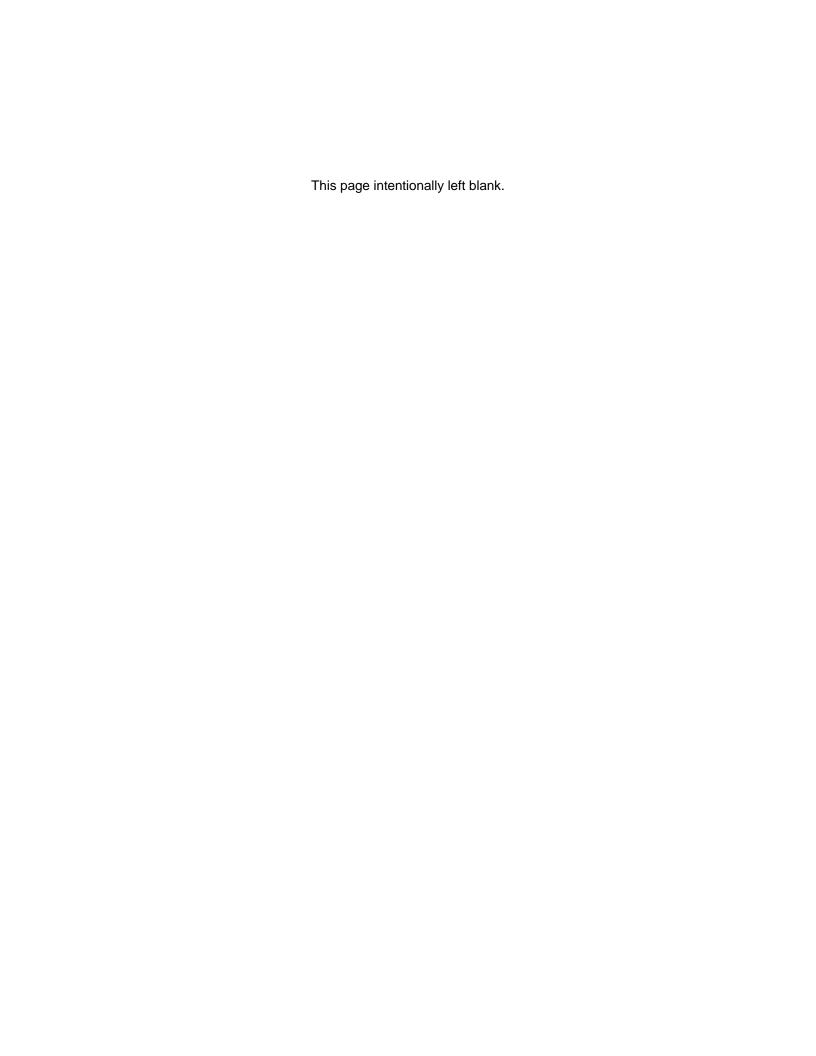
Stibnite Gold Project EIS Appendix H

Vegetation: General Vegetation Communities, Botanical Resources, and Non-native Plants



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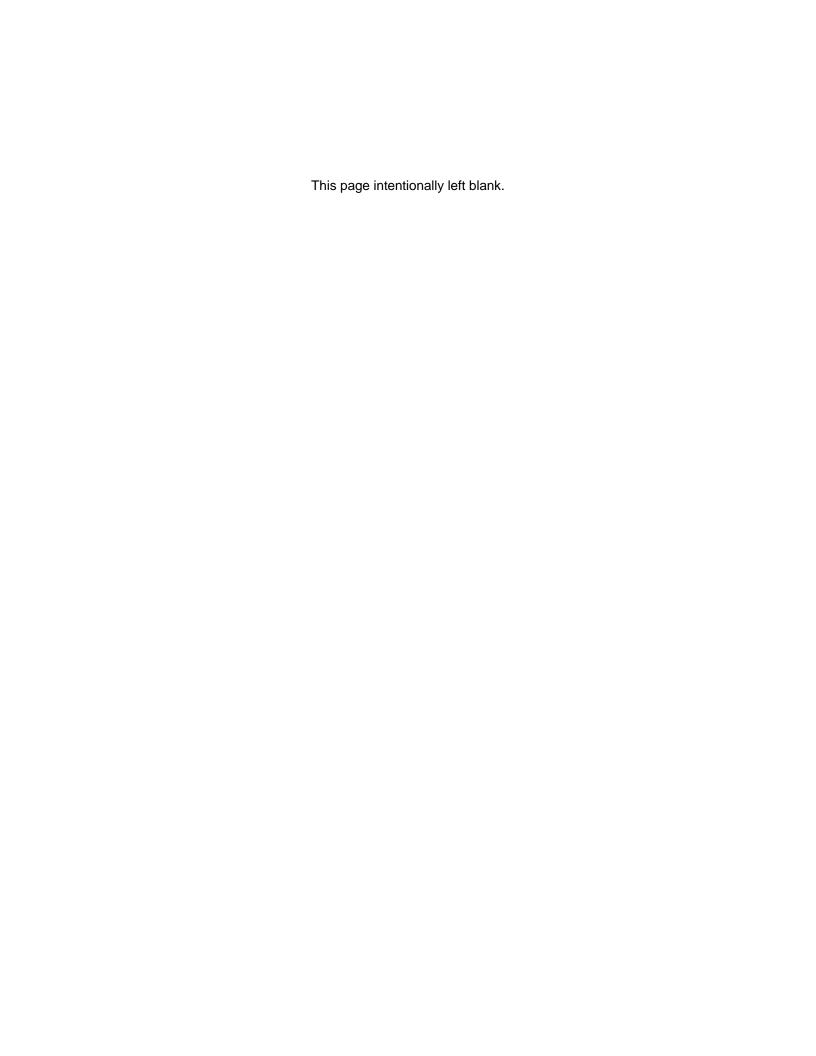
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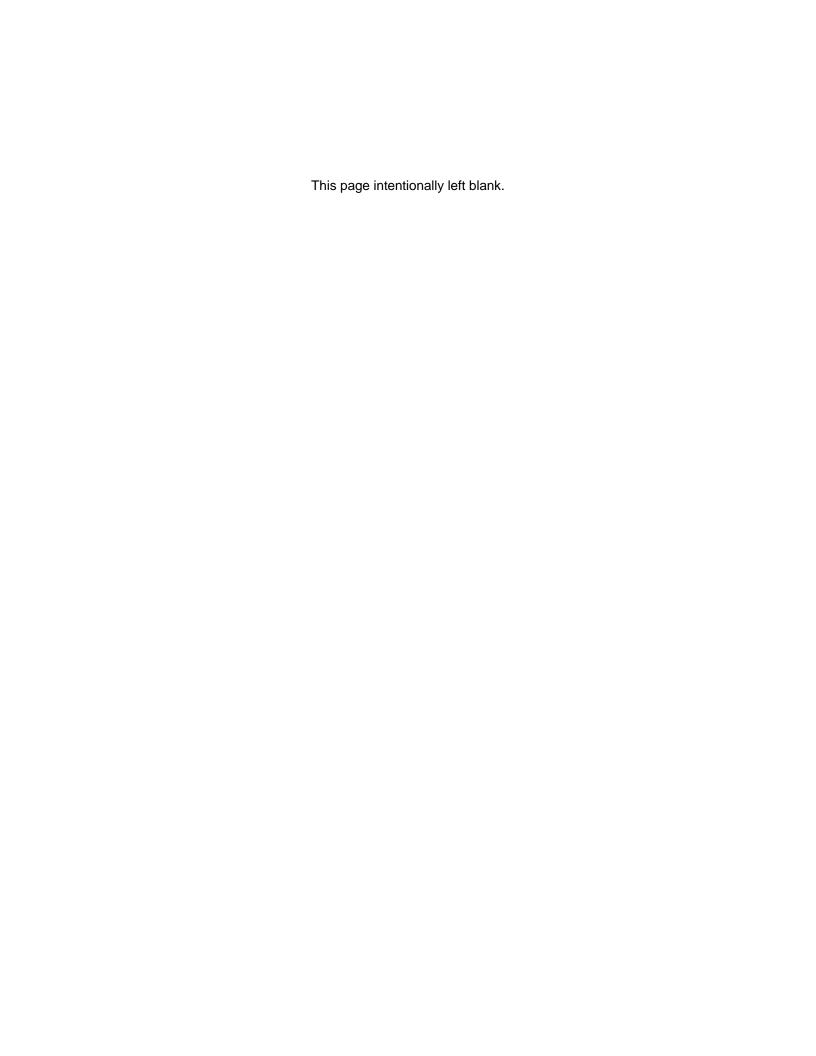
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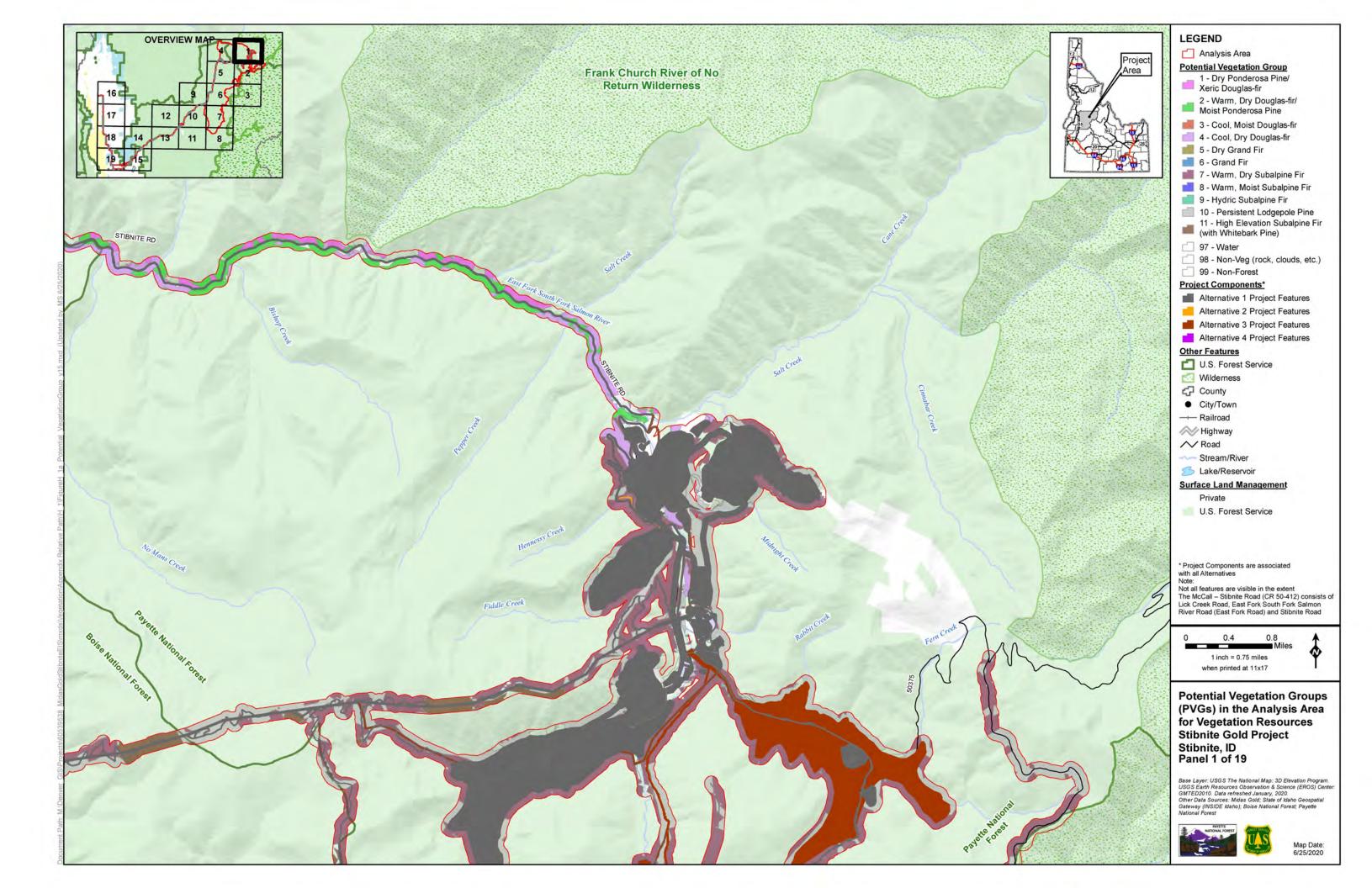
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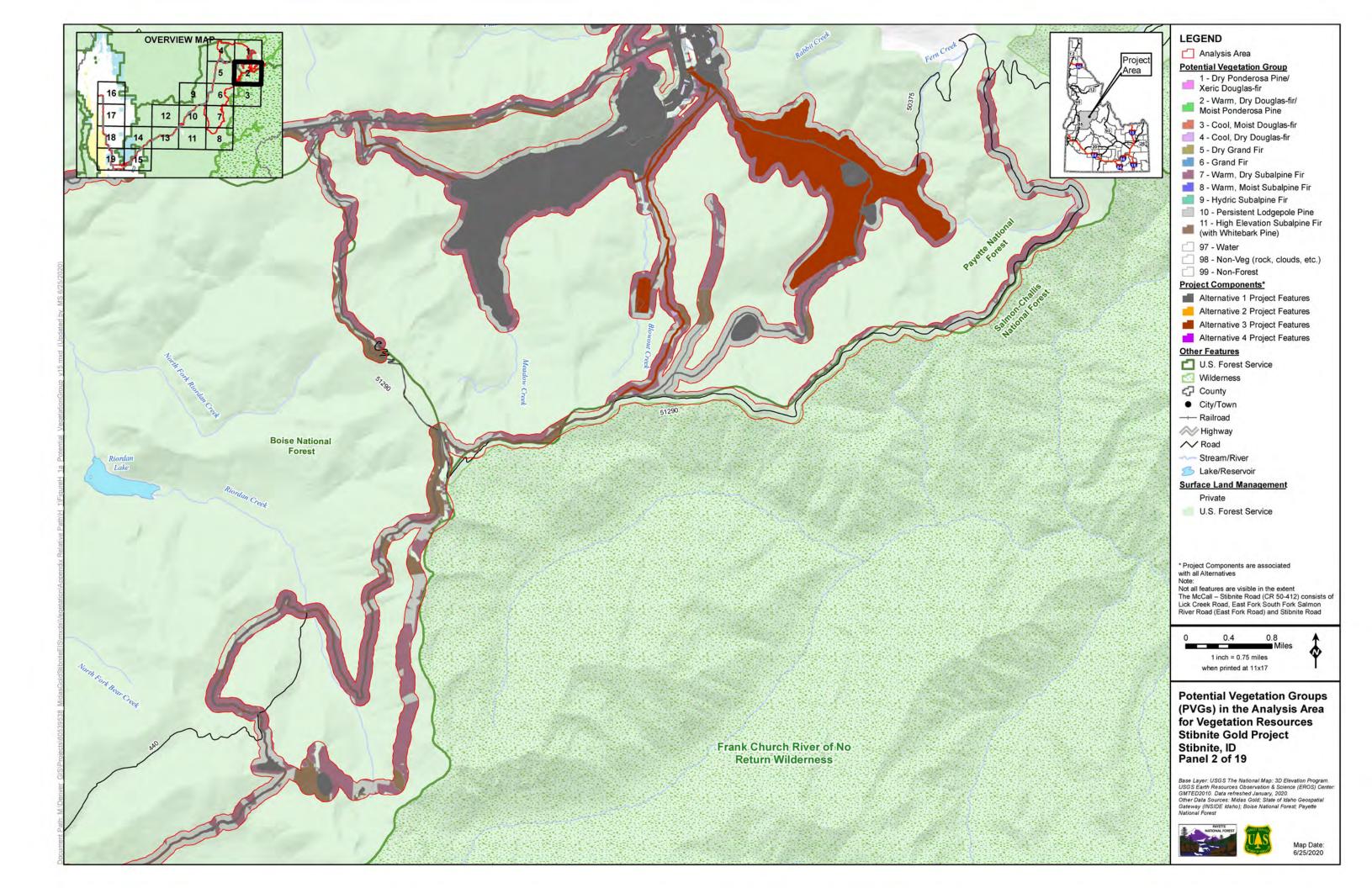
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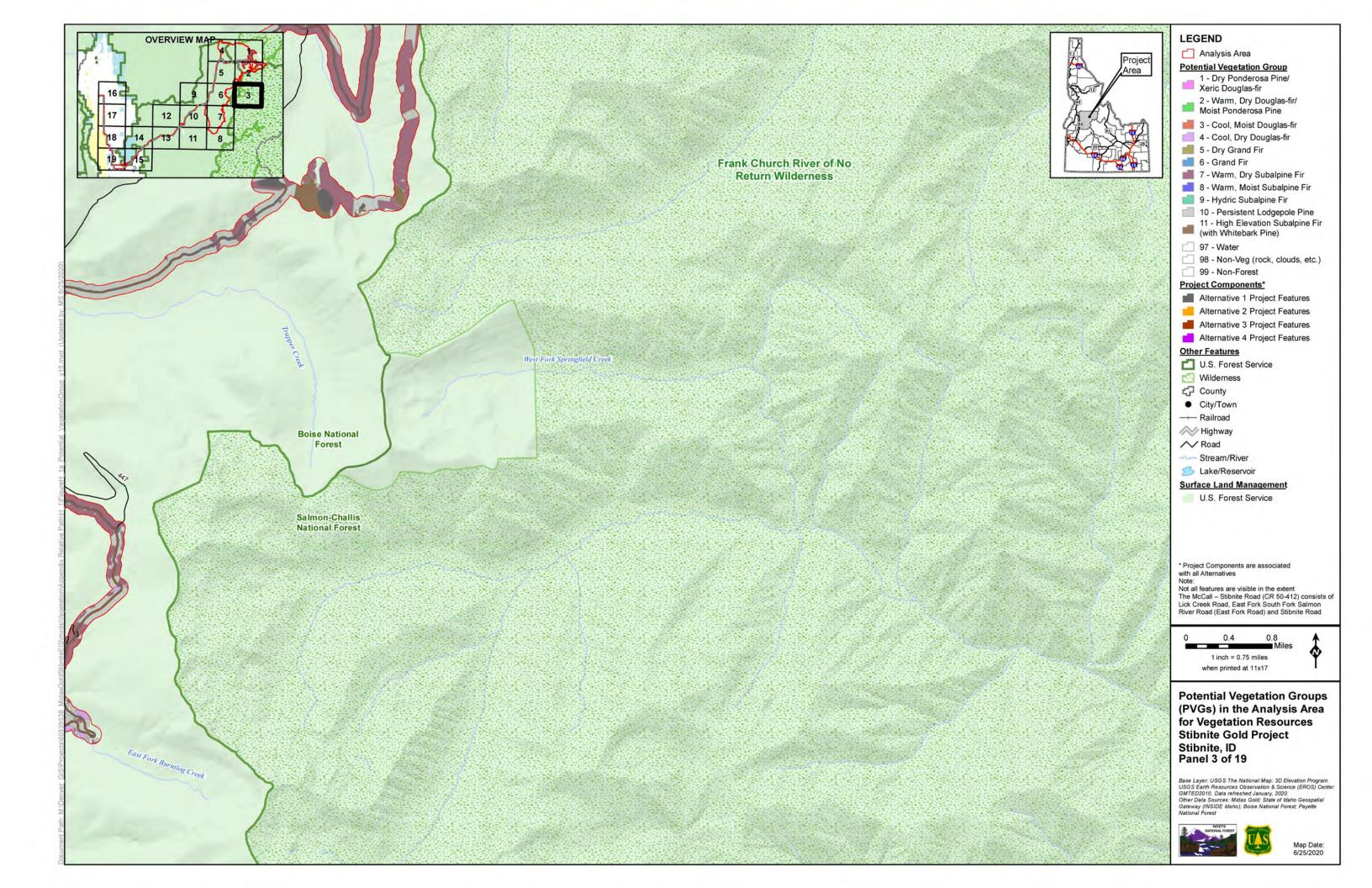


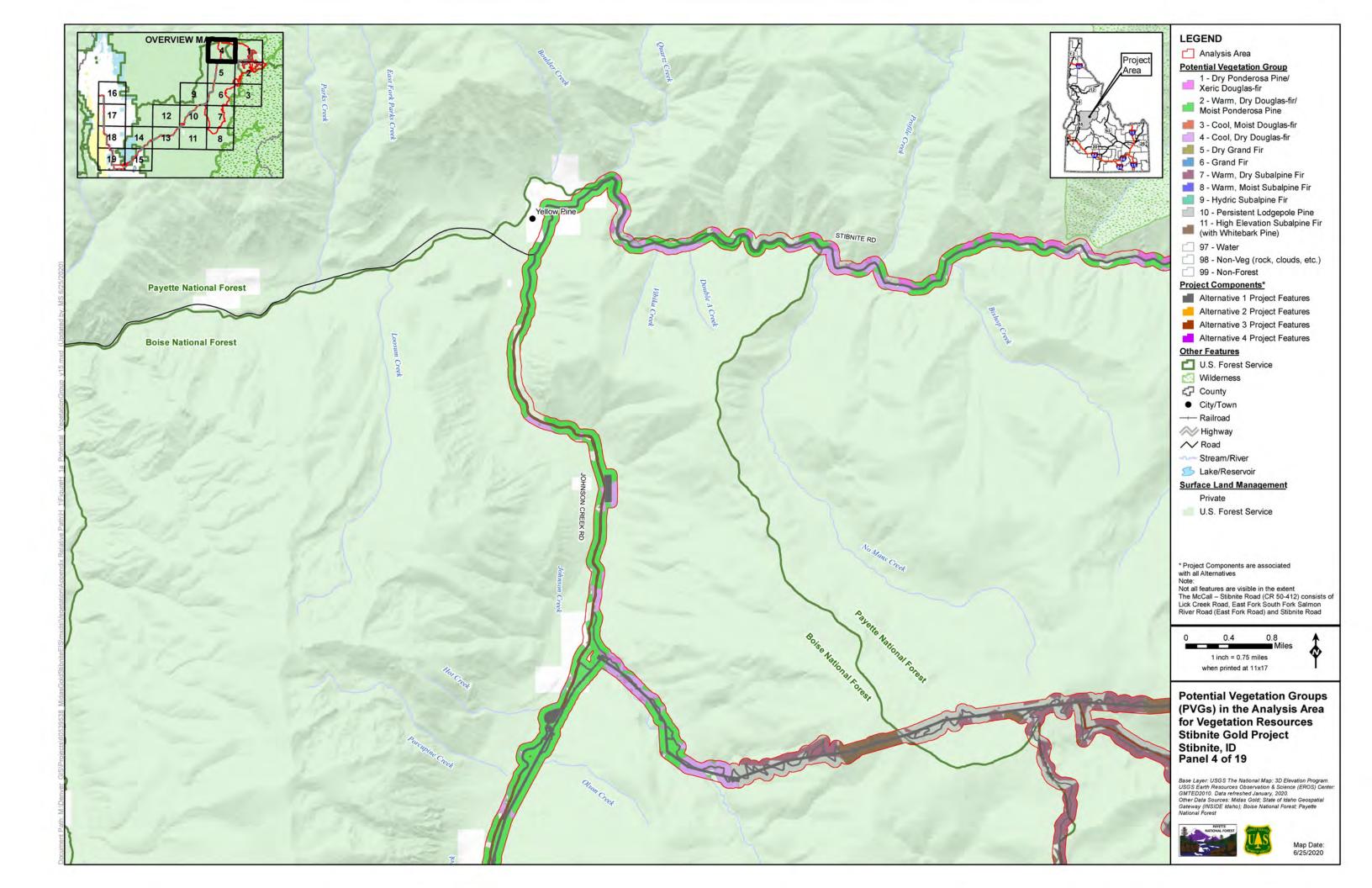
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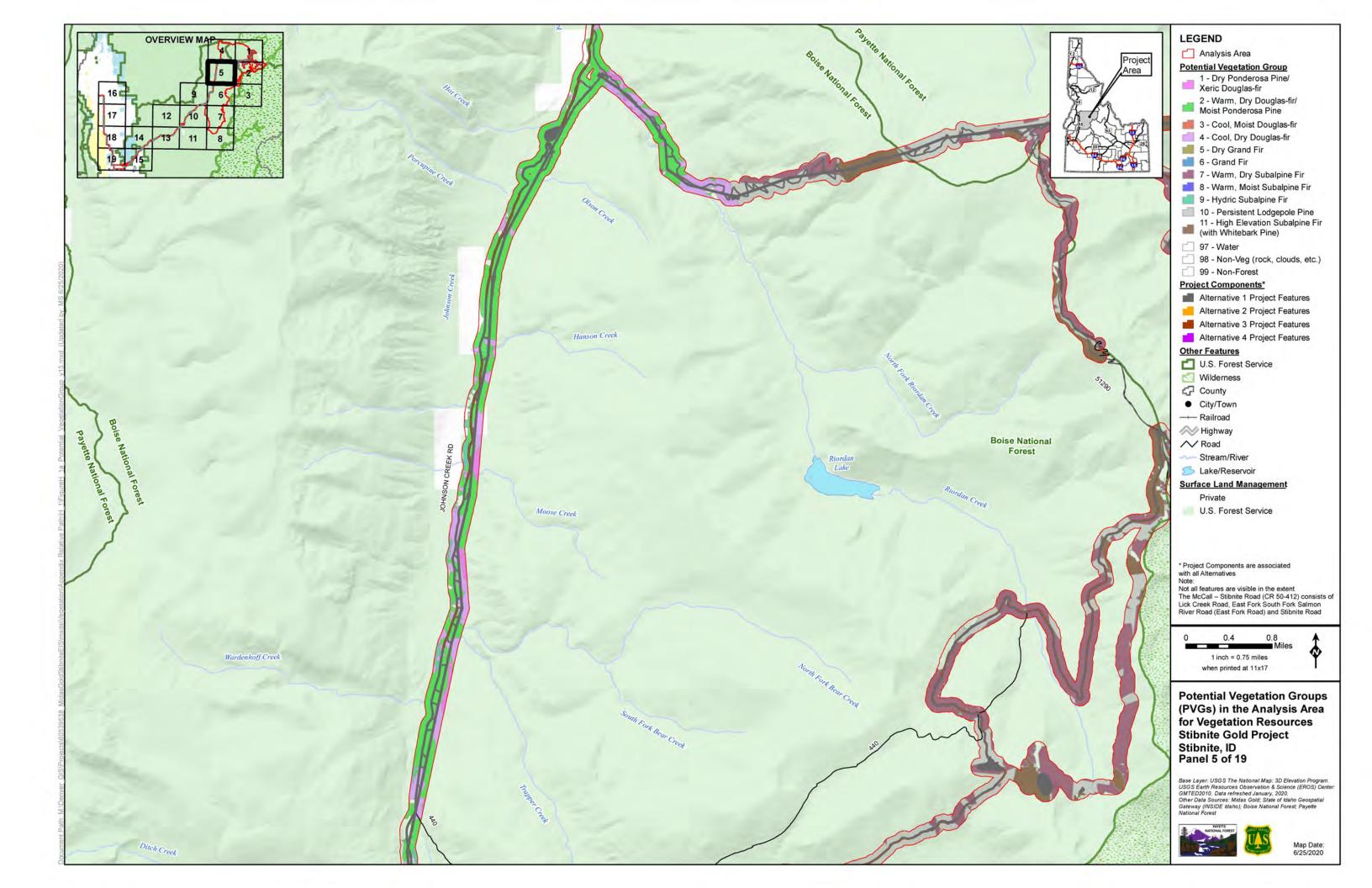


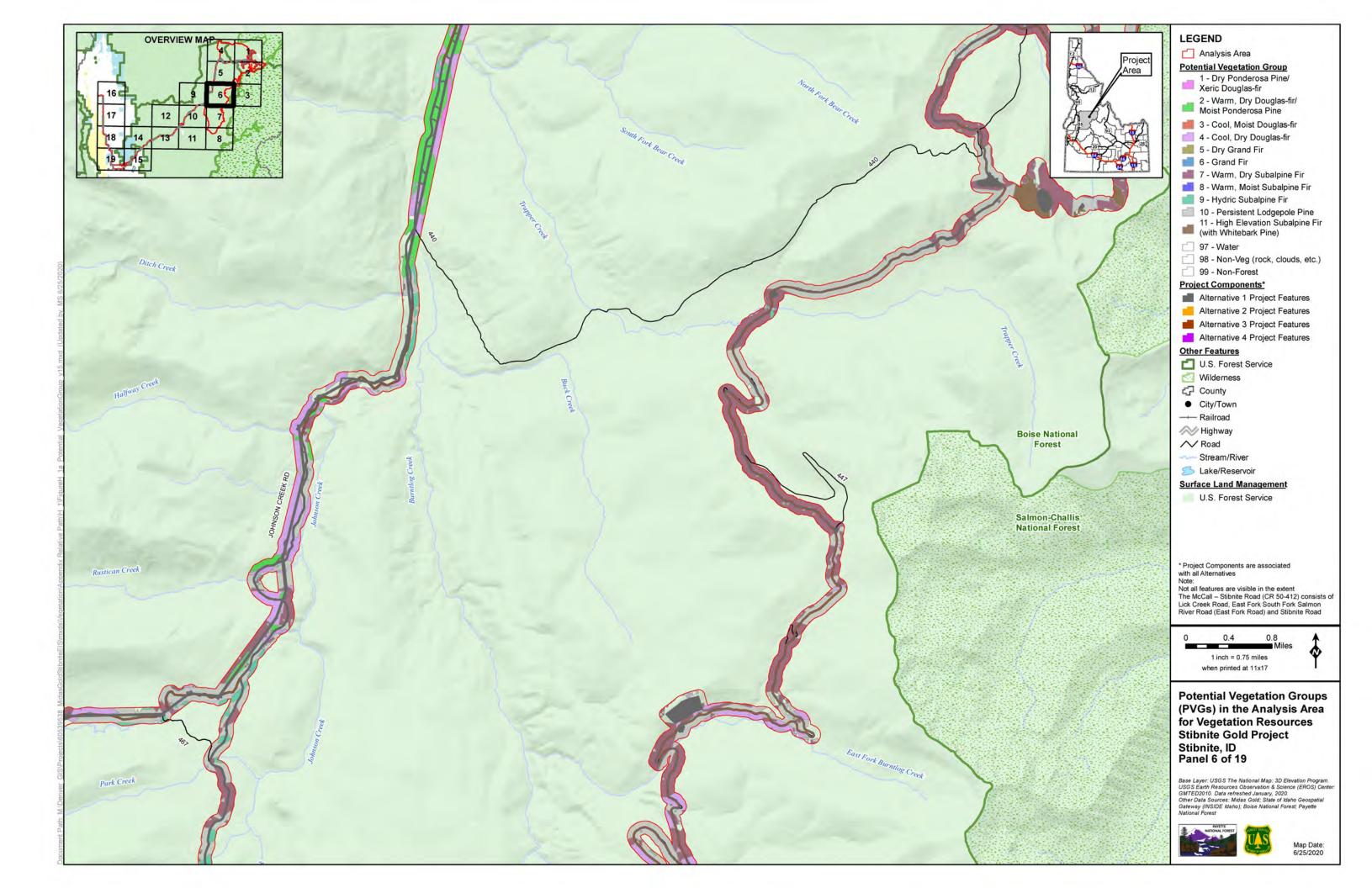


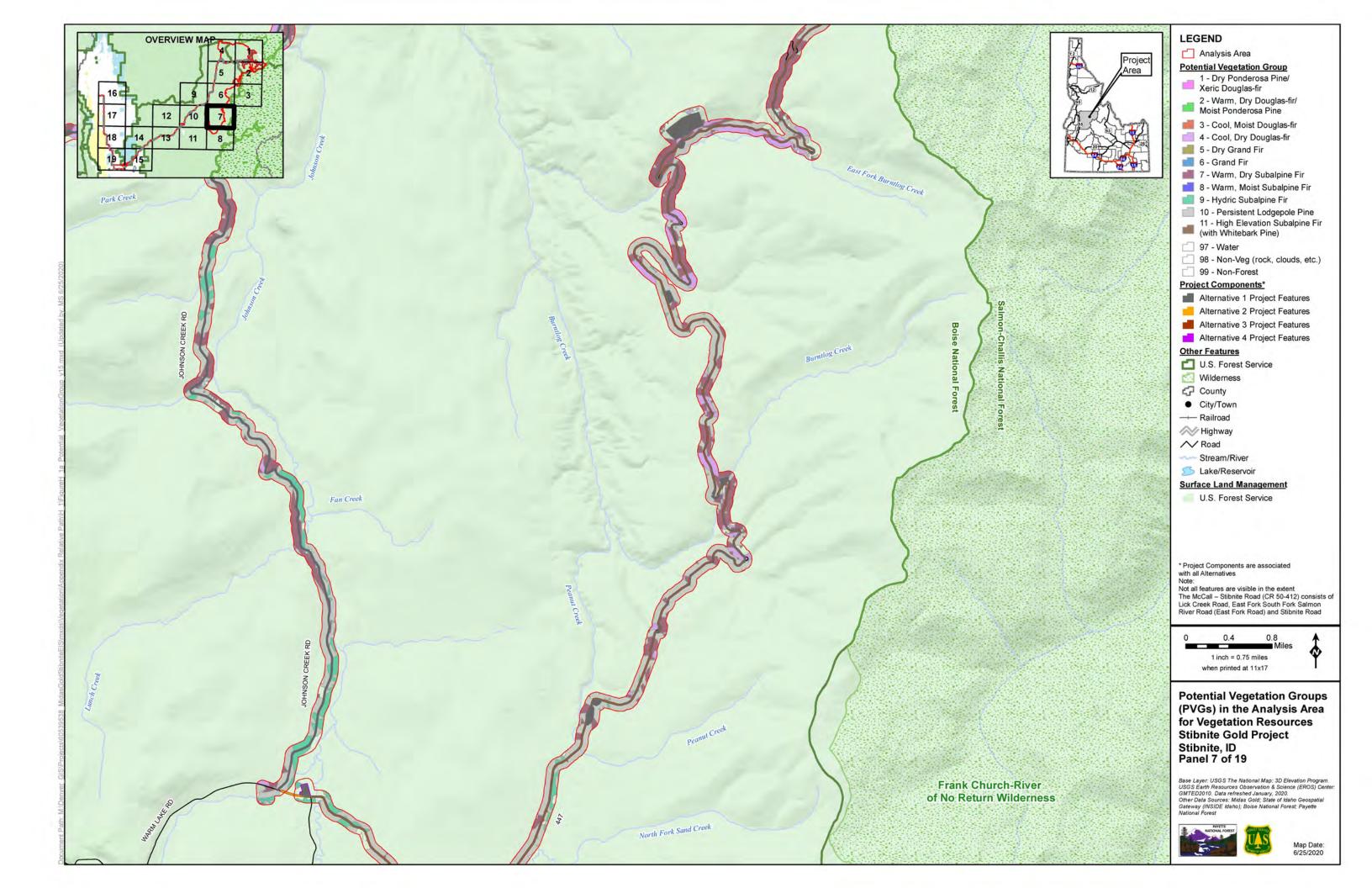


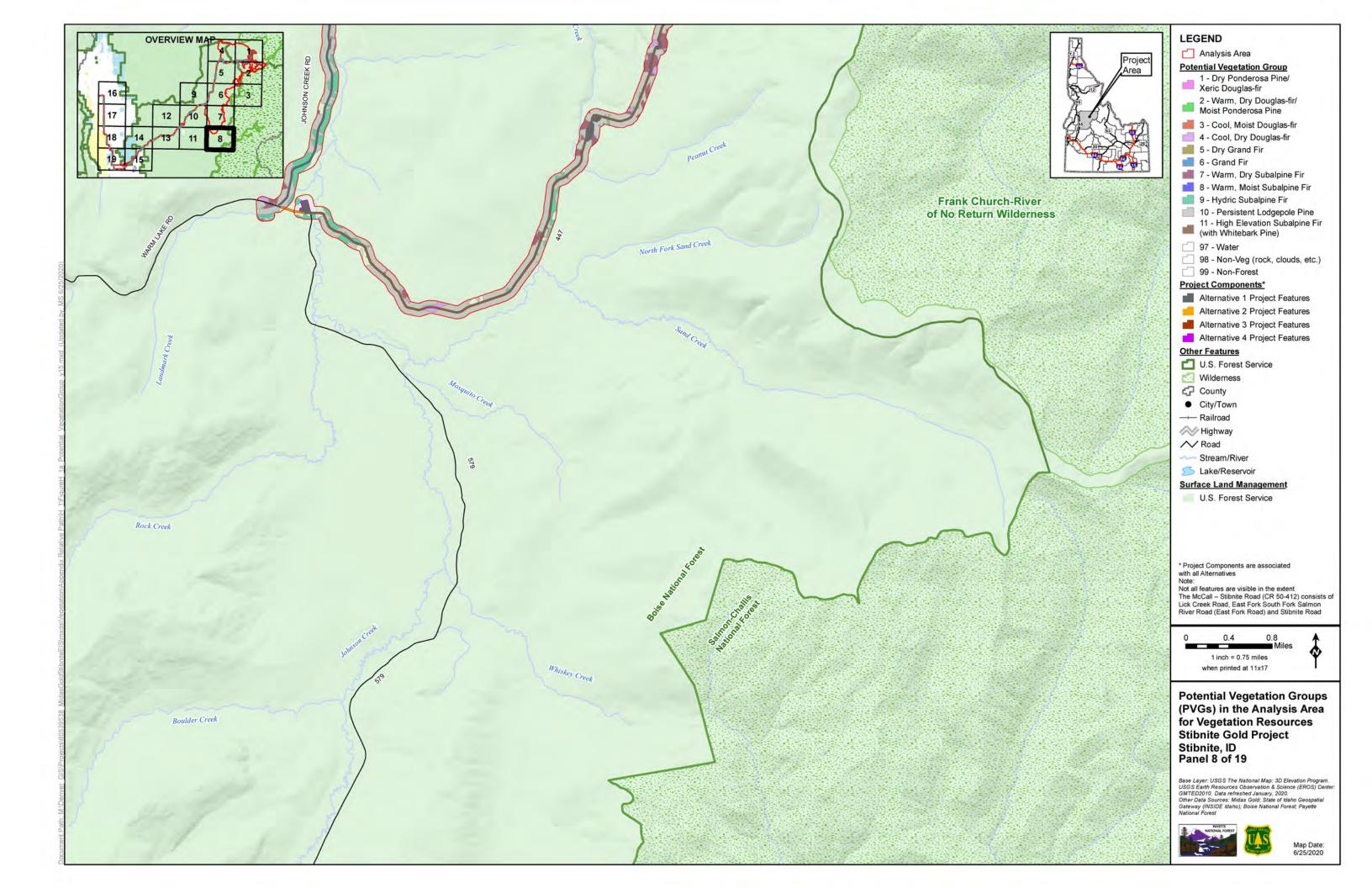


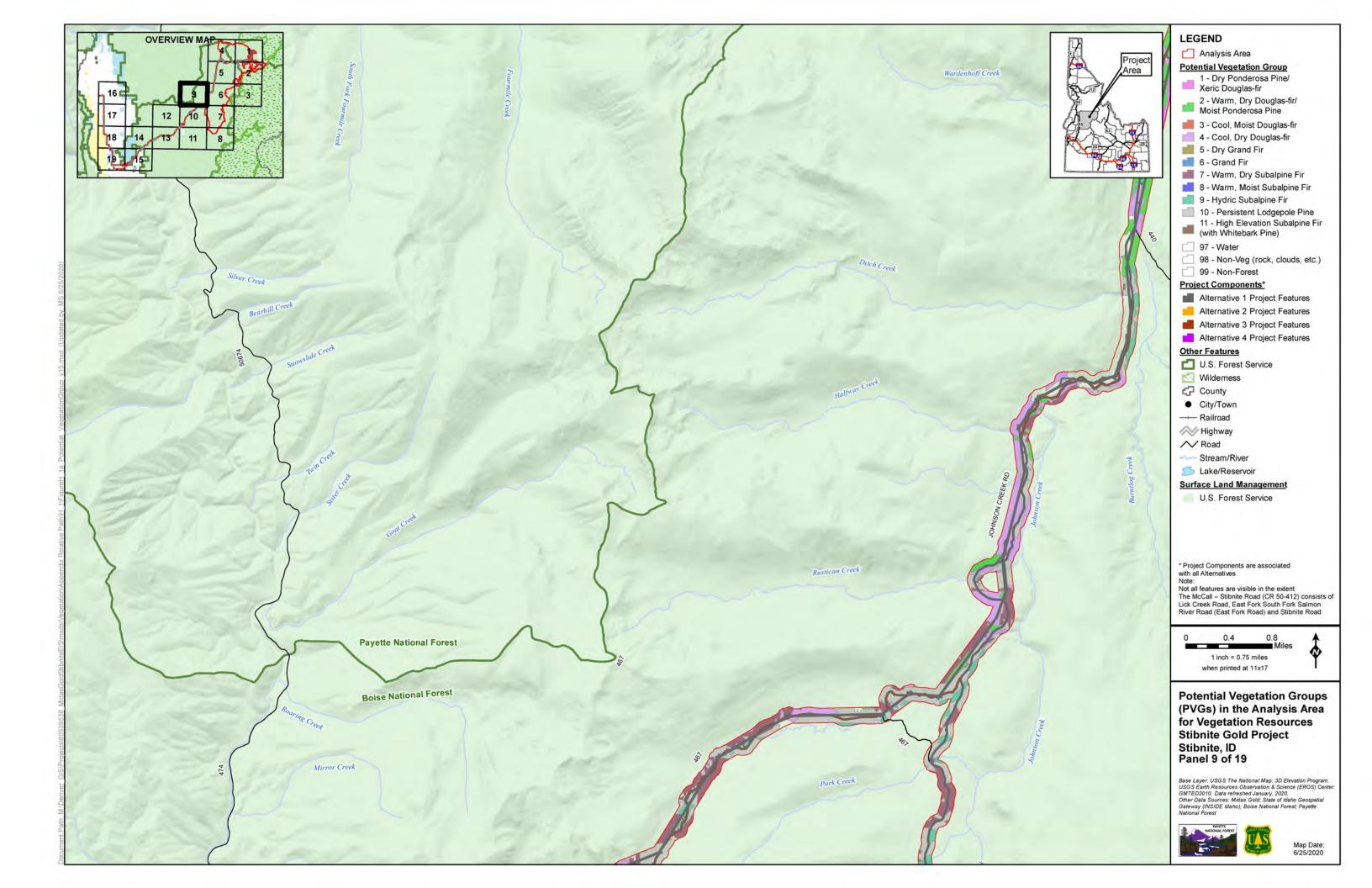


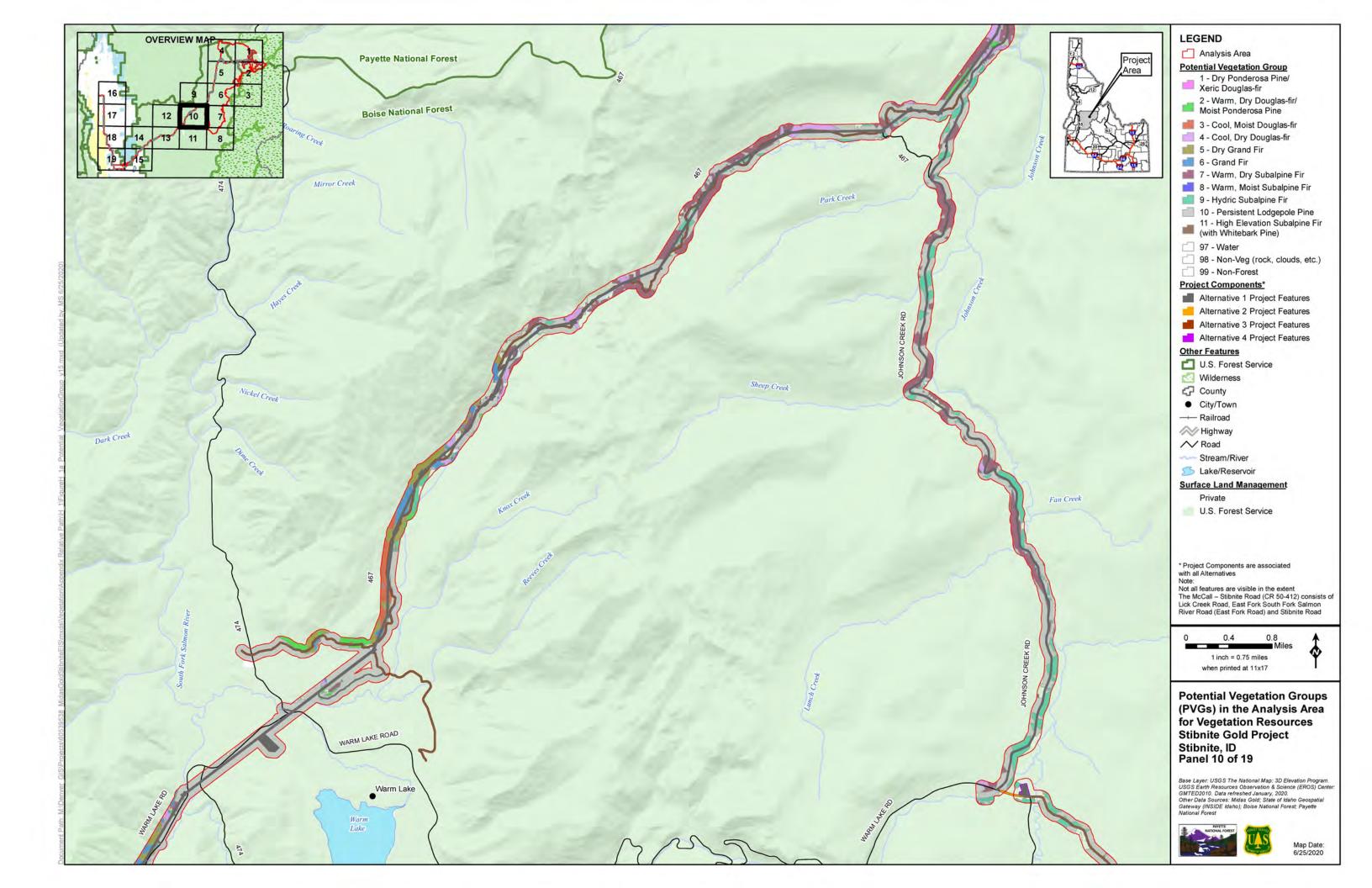


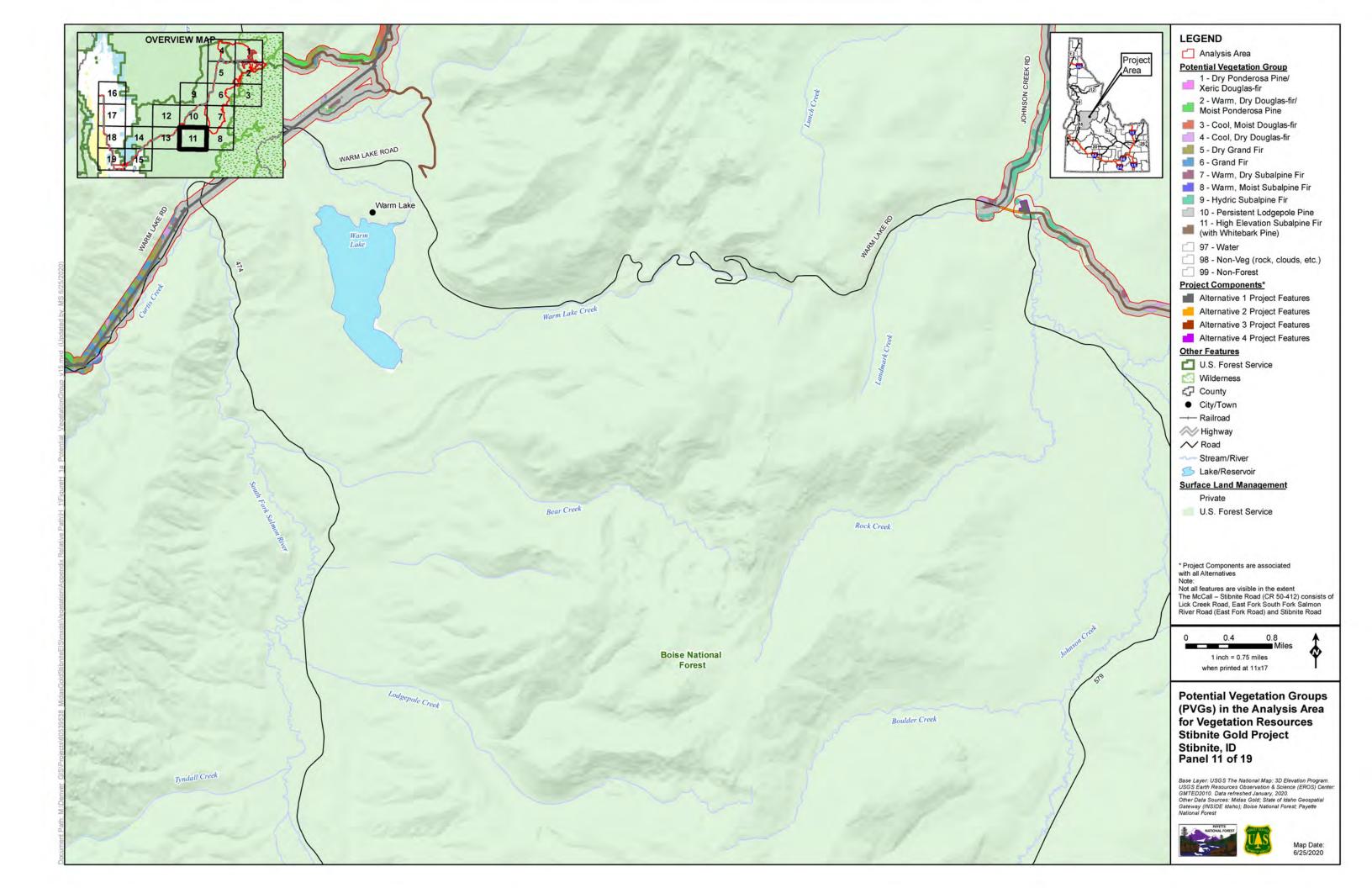


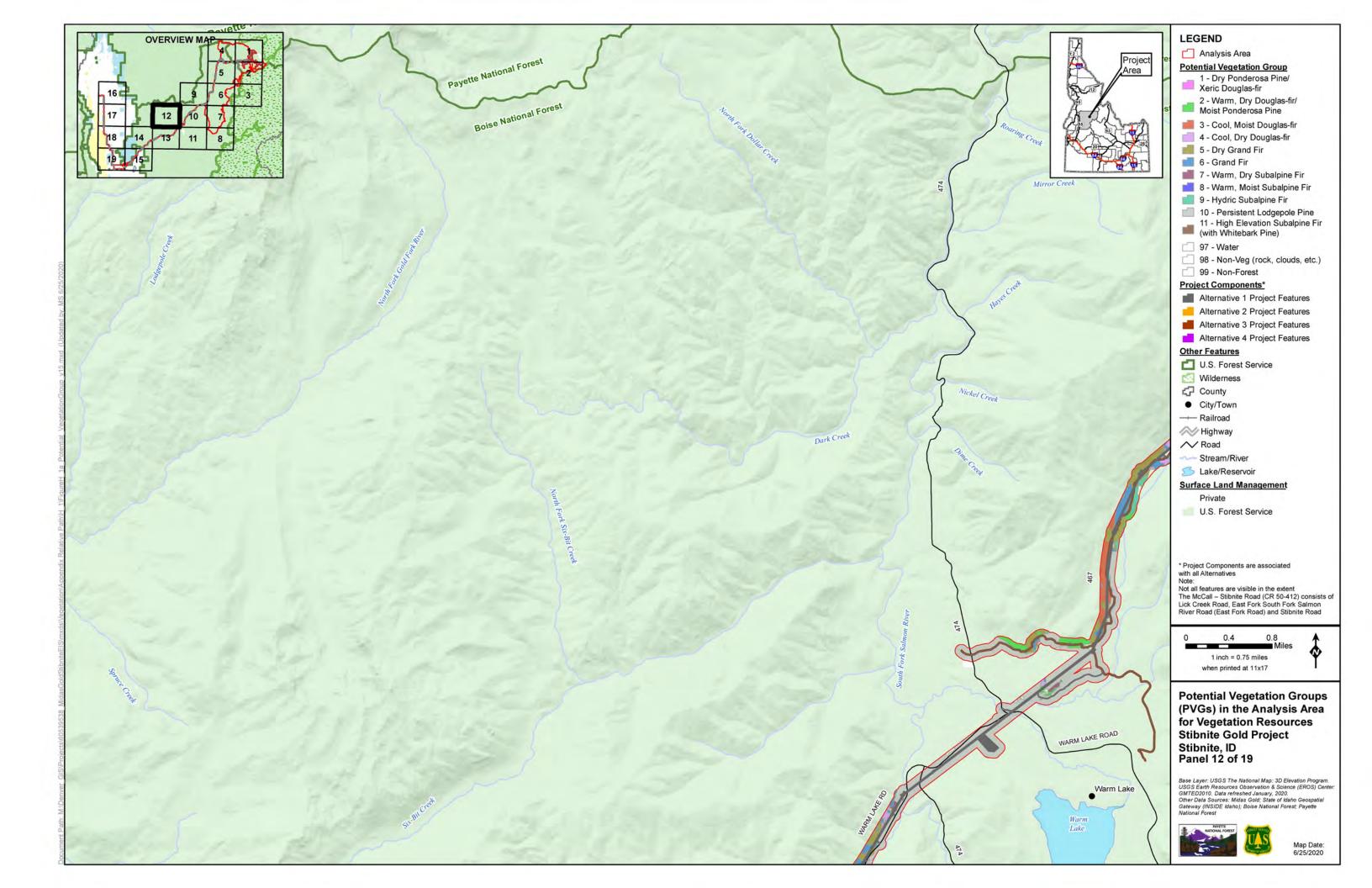


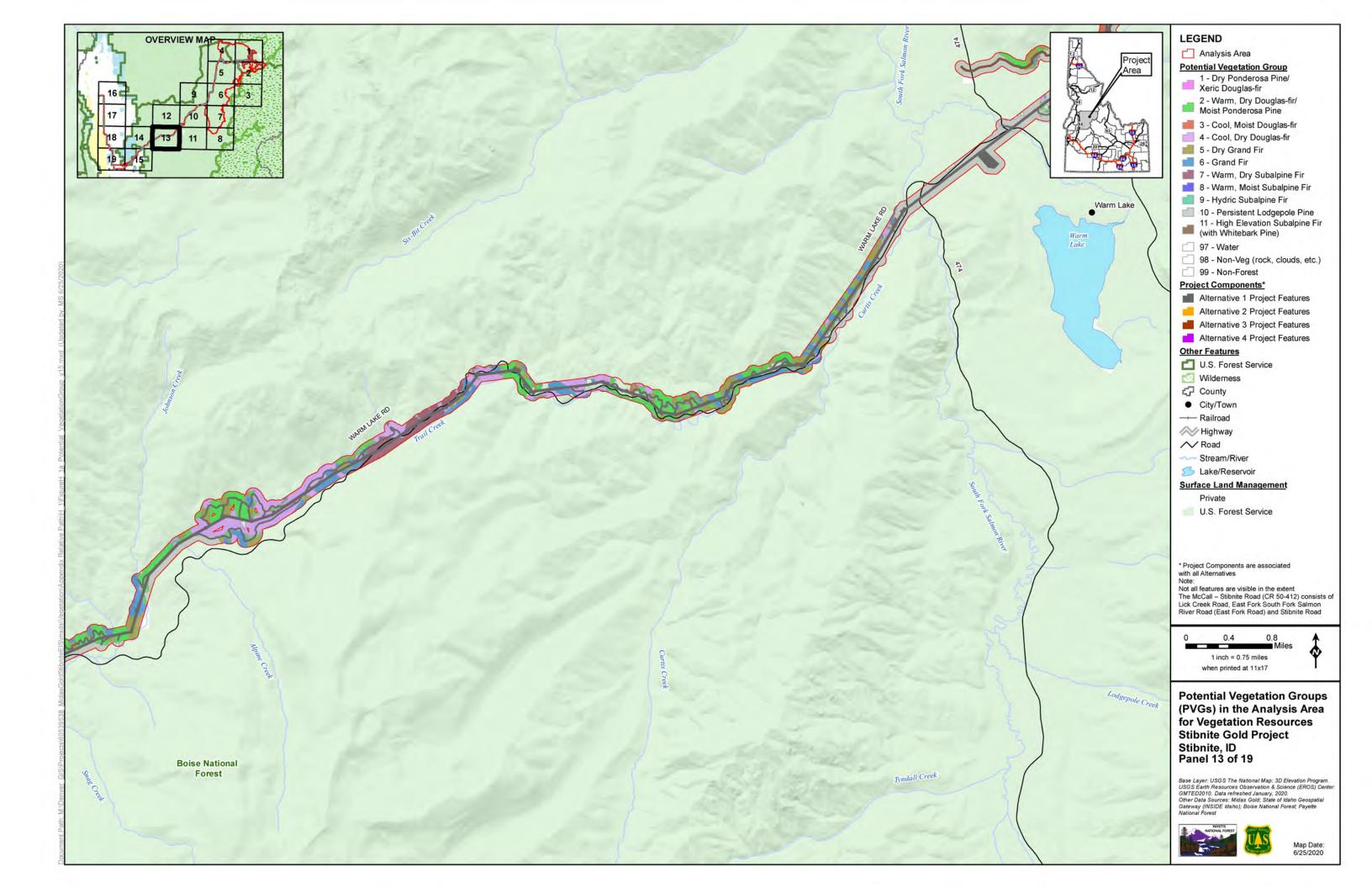


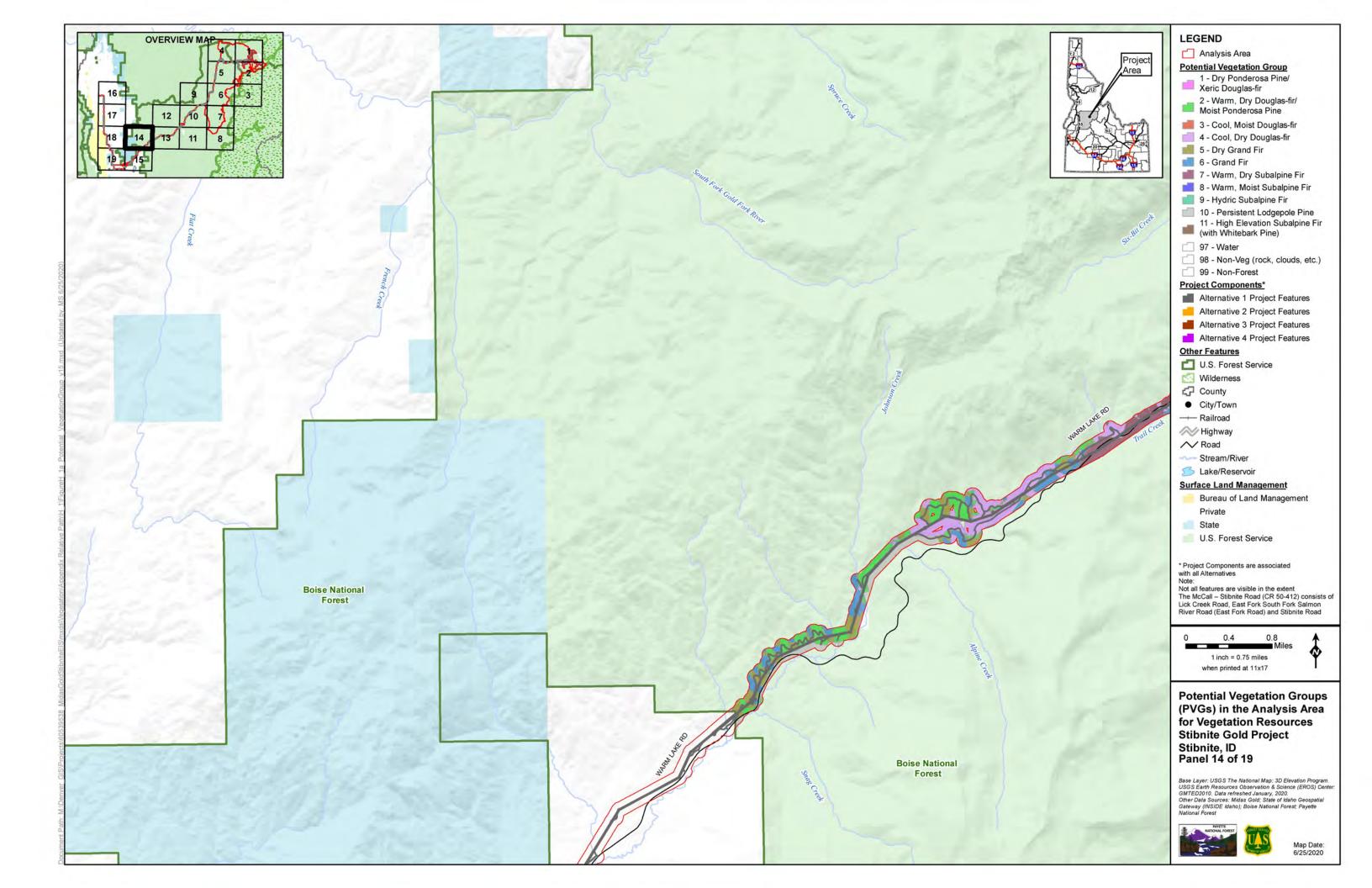


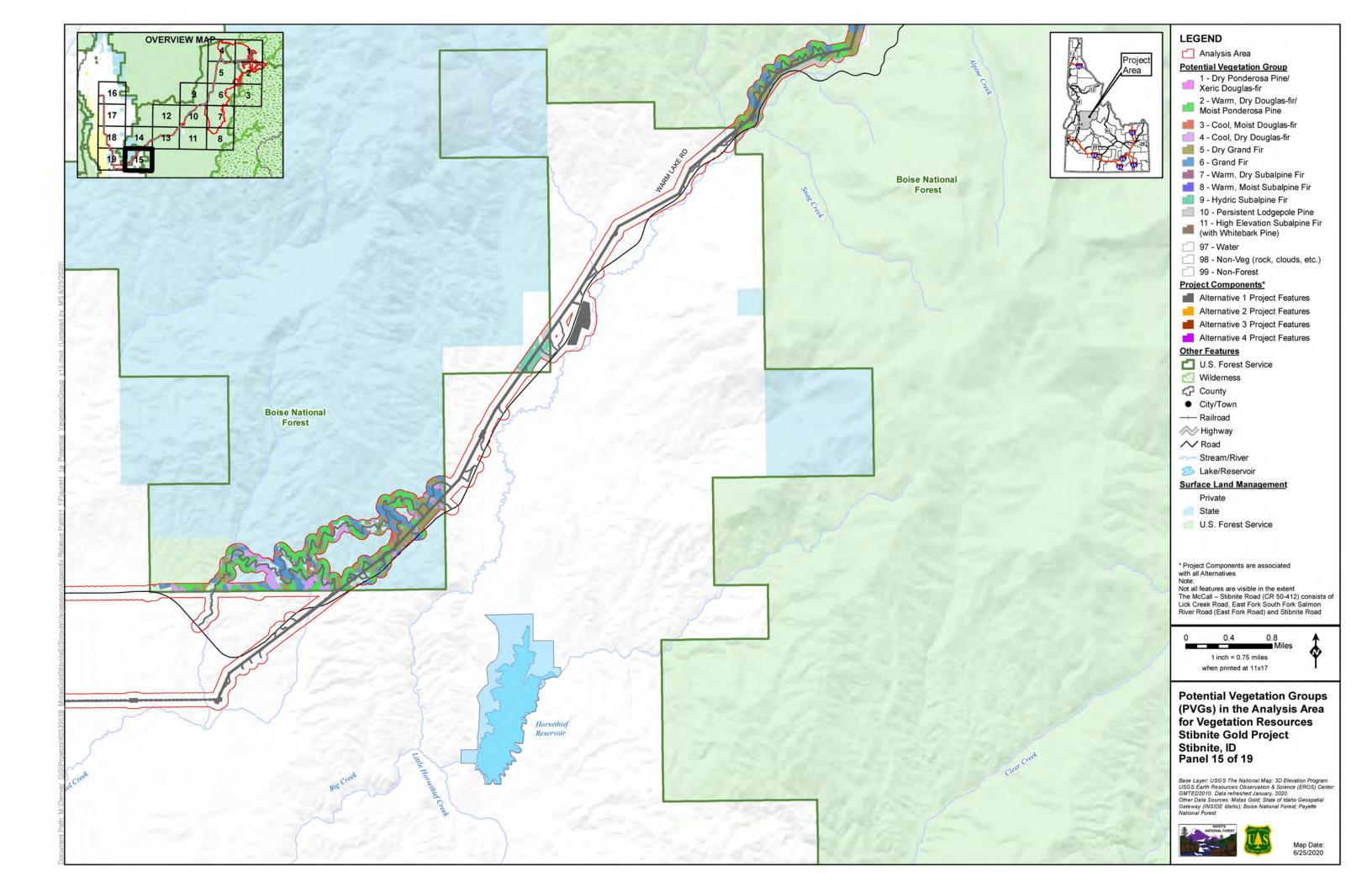


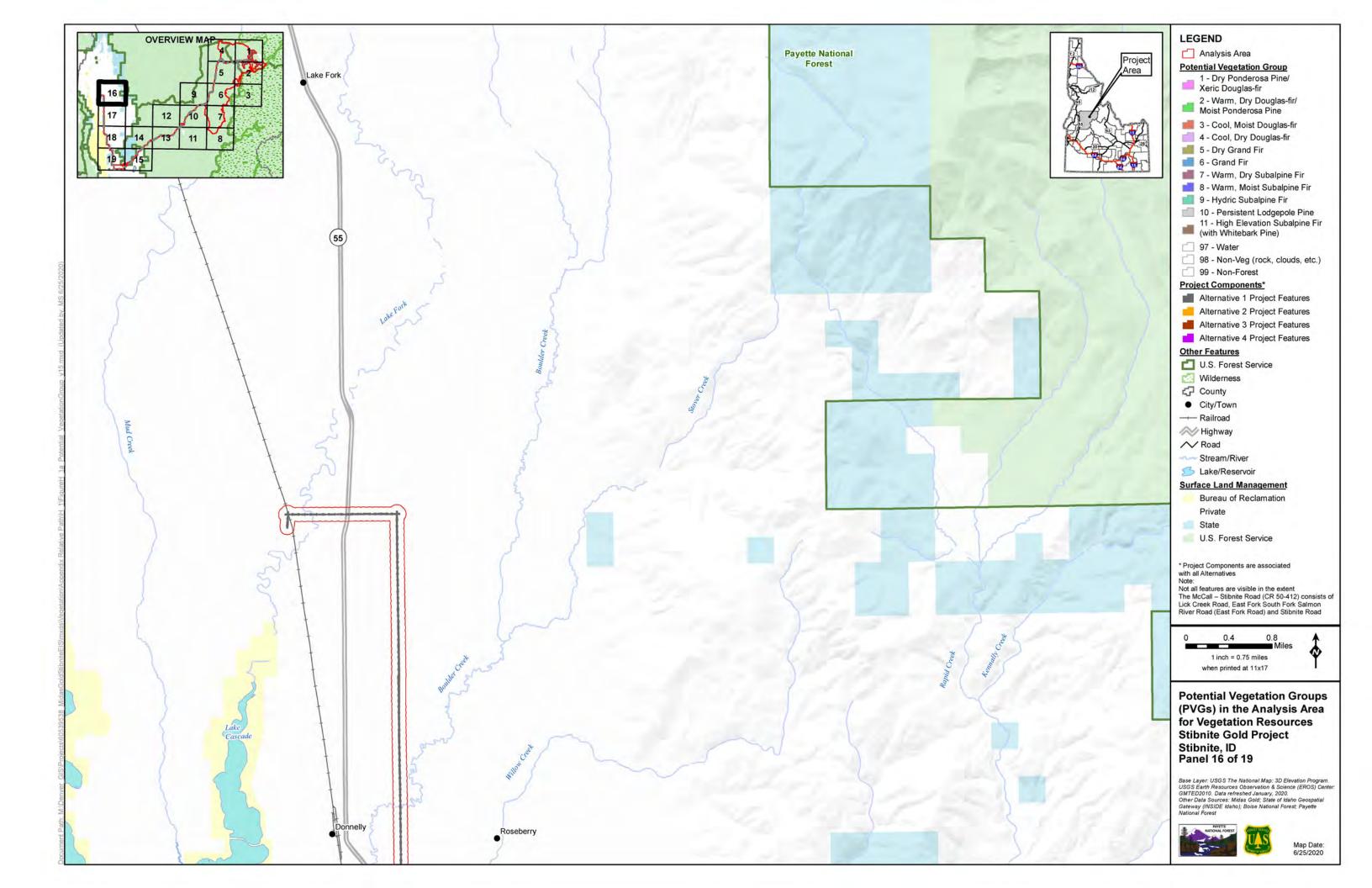


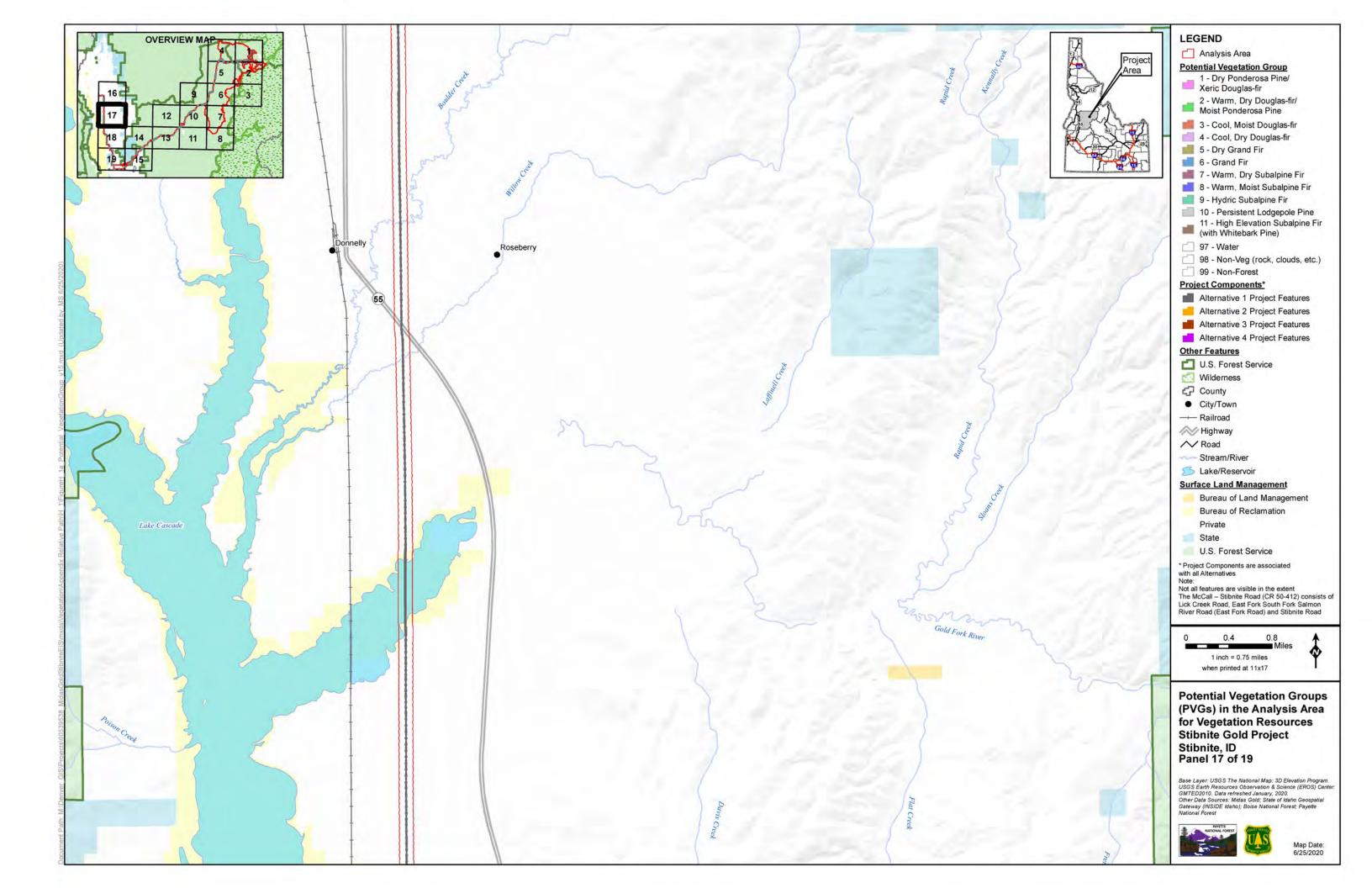


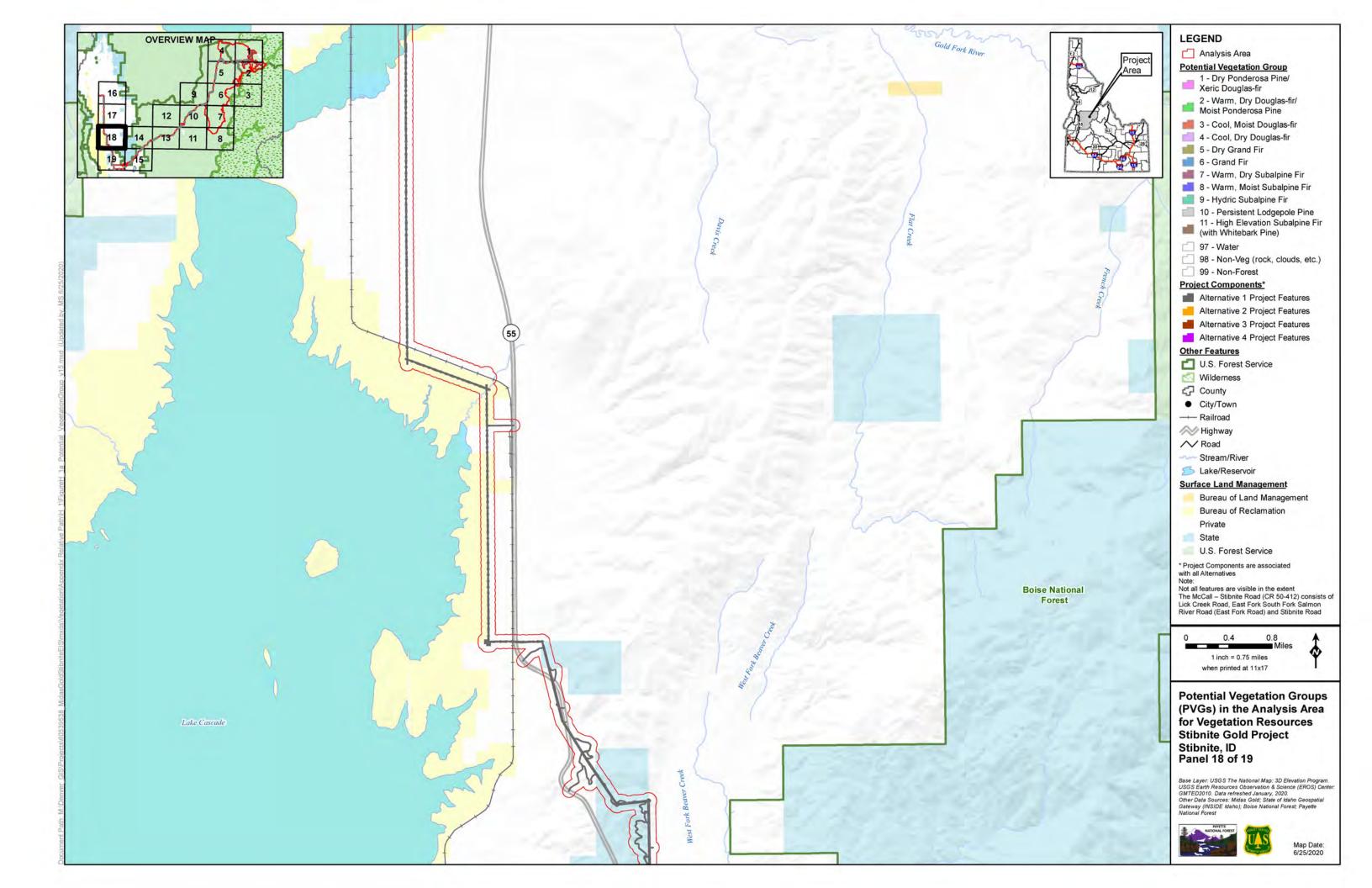


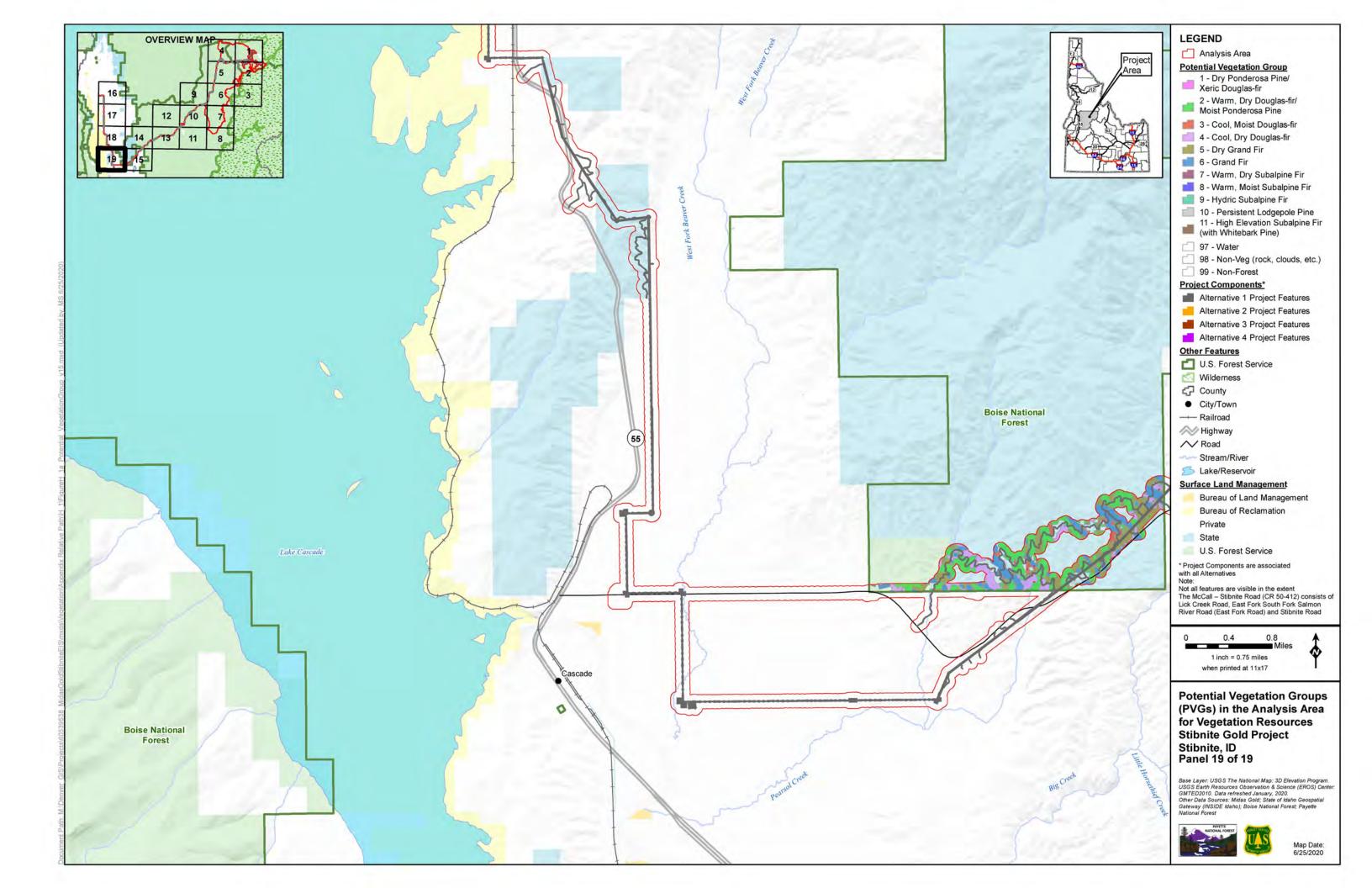


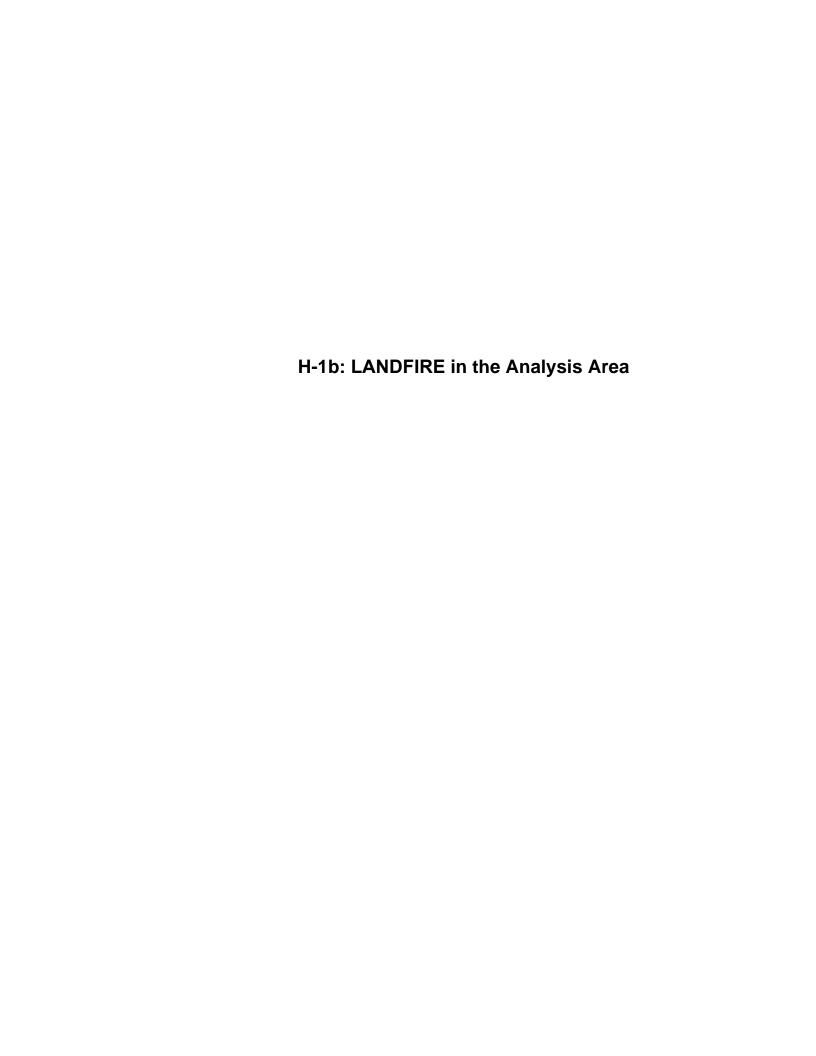


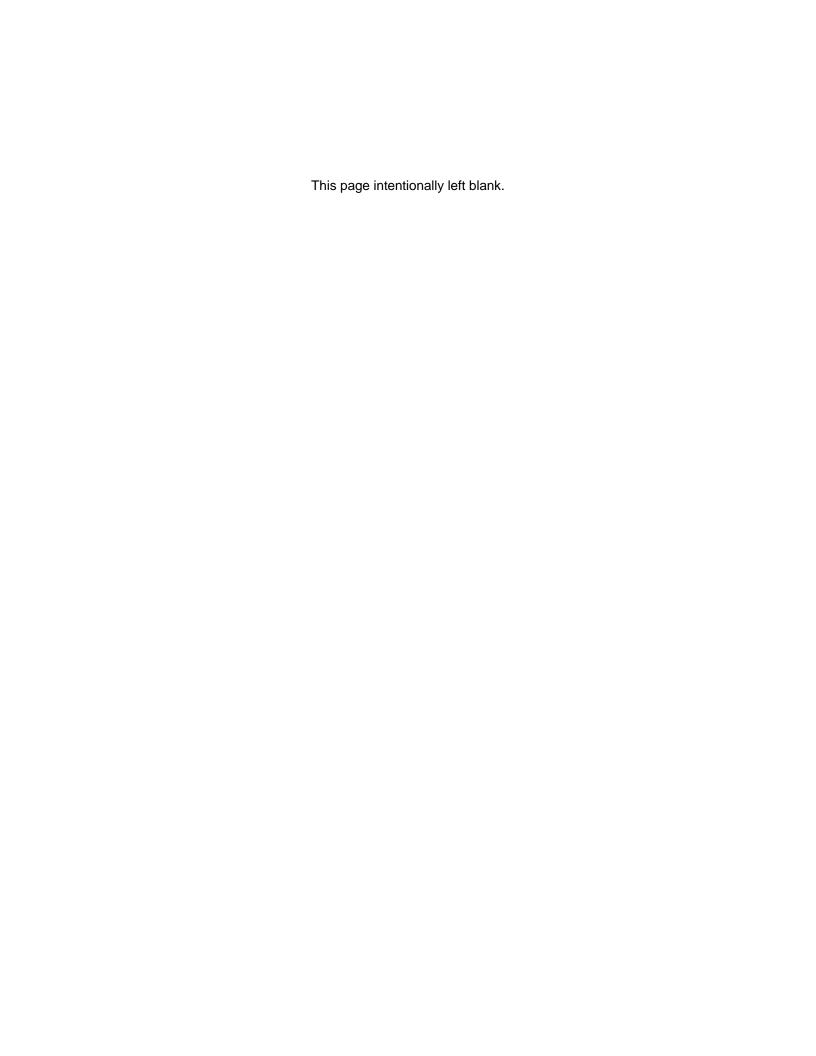


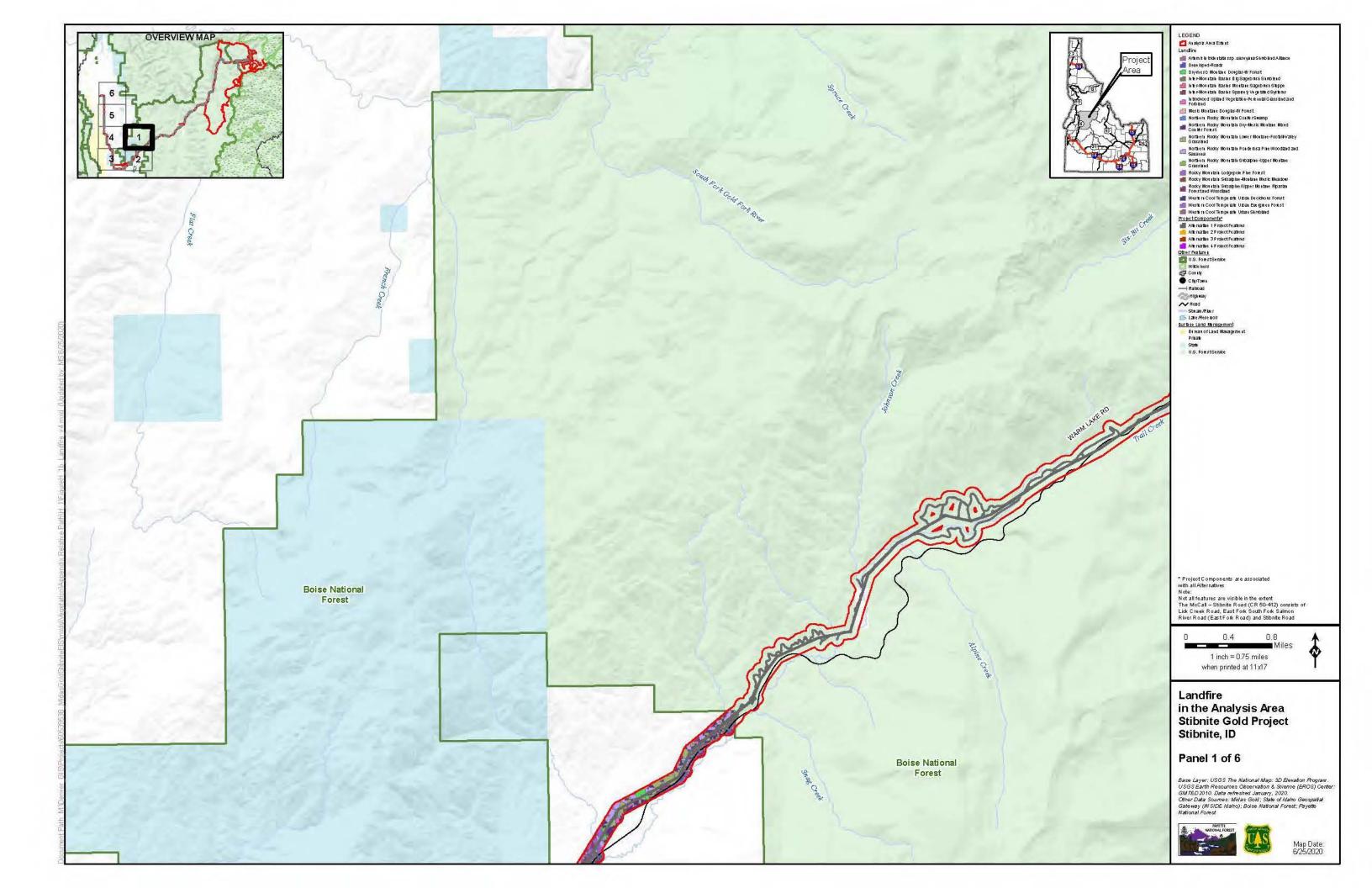


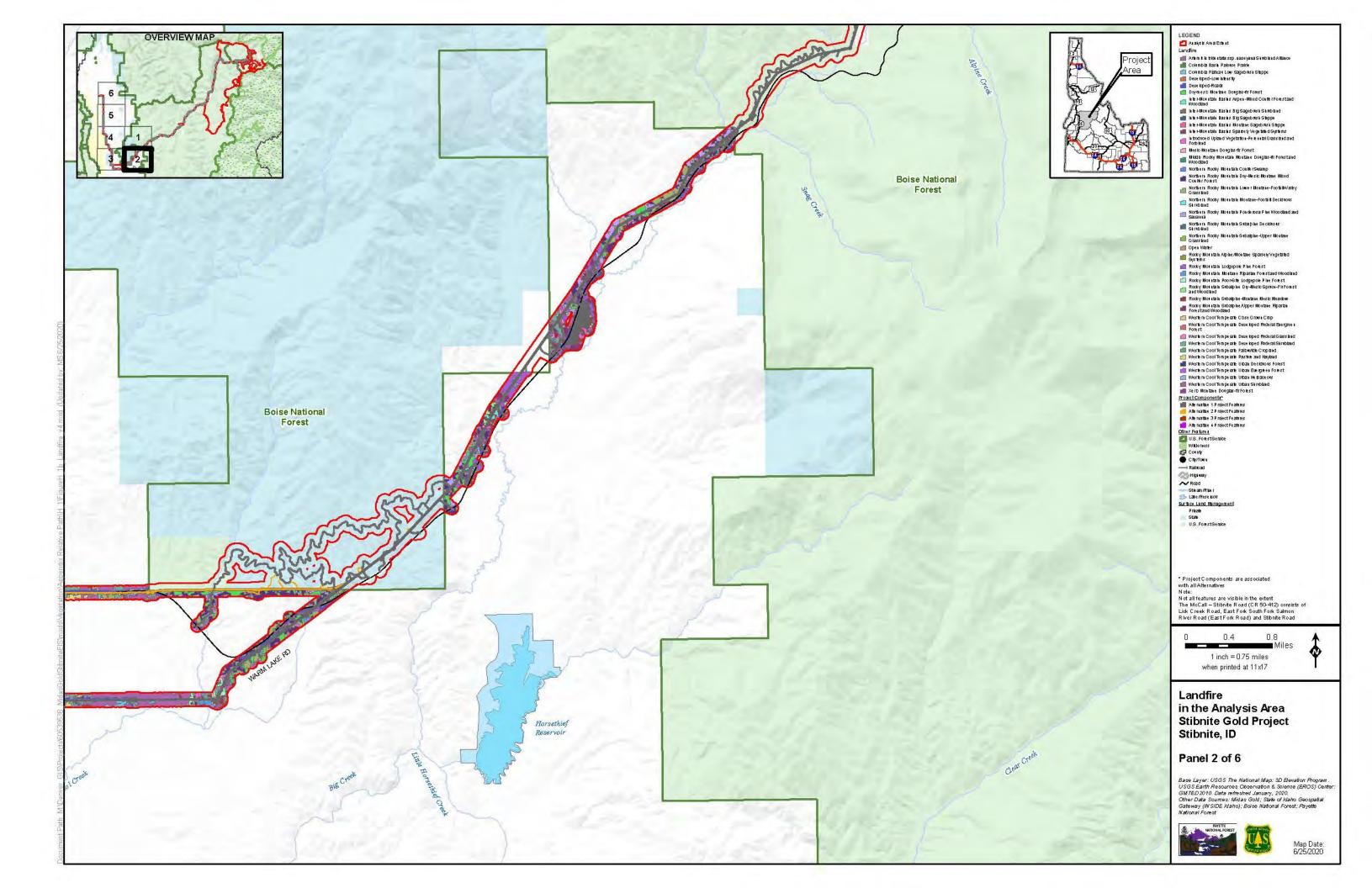


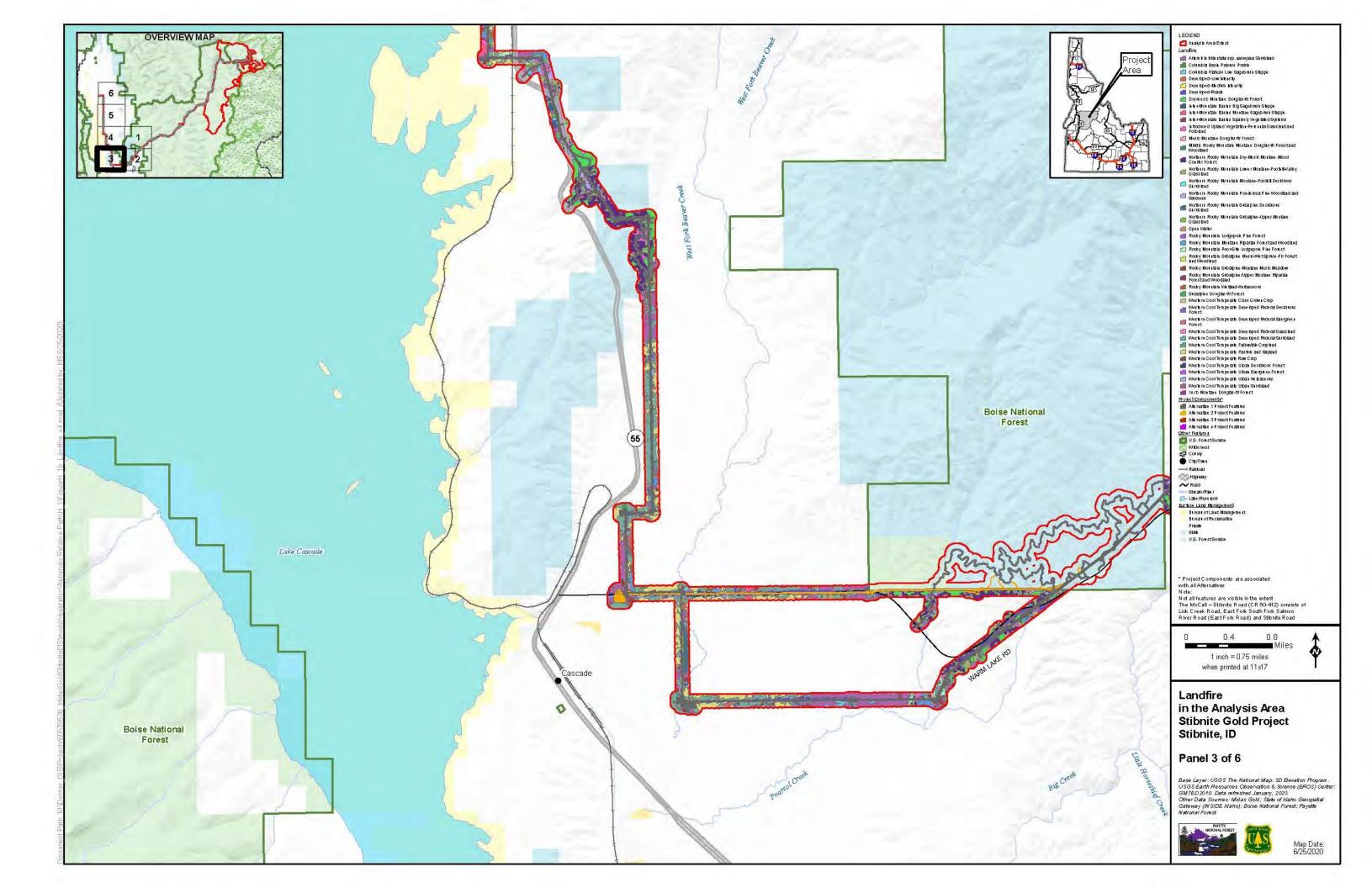


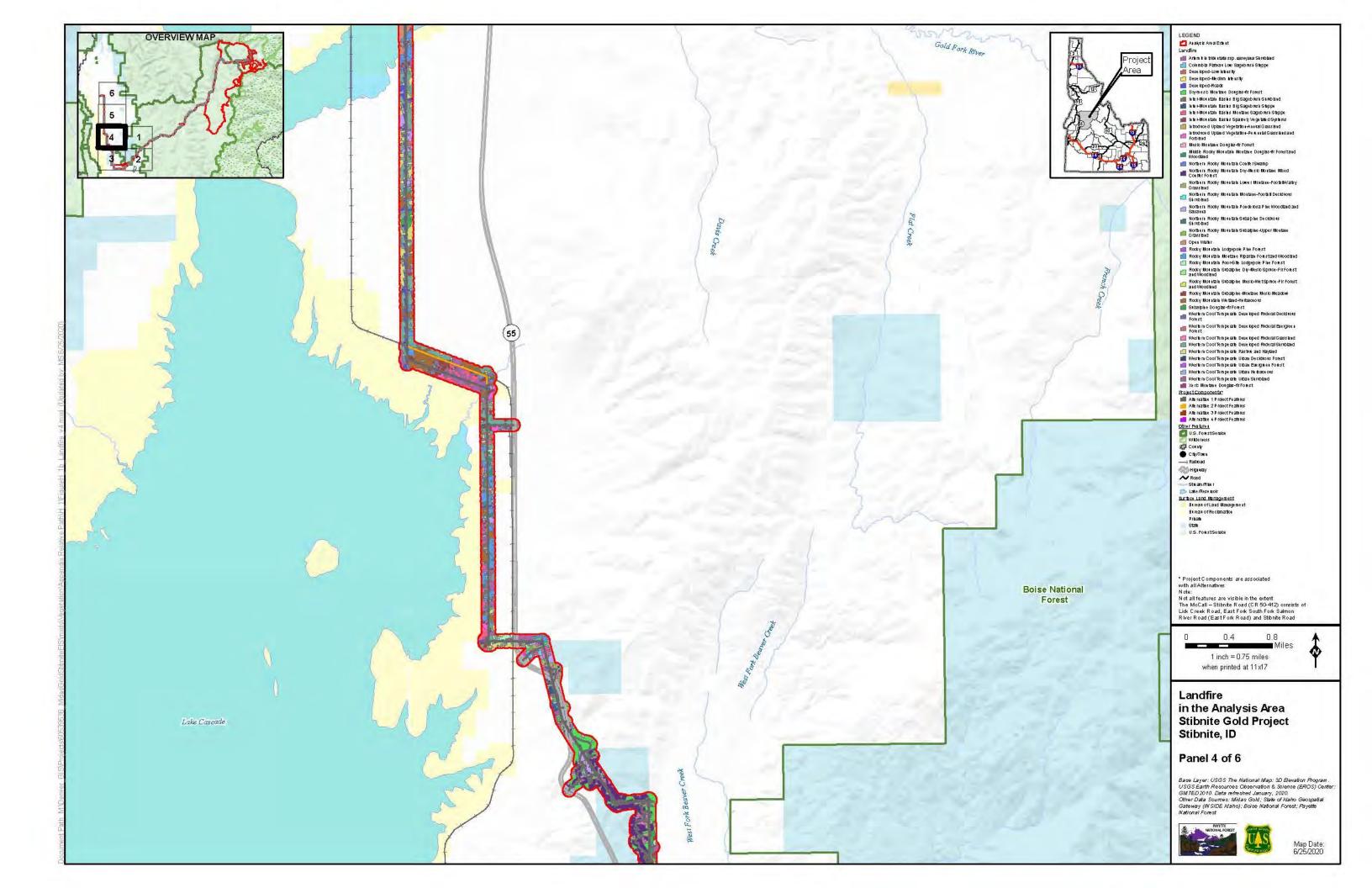


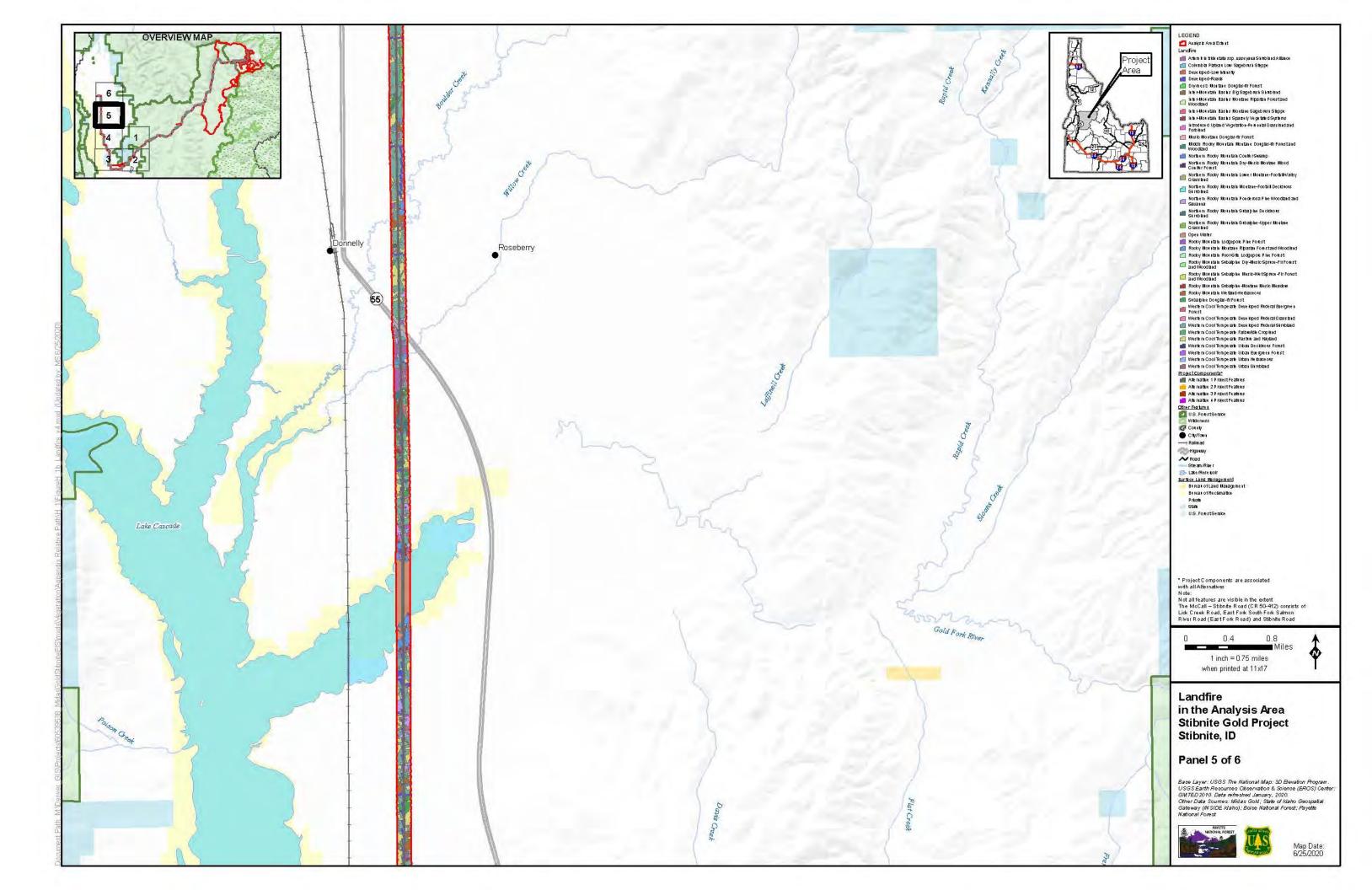


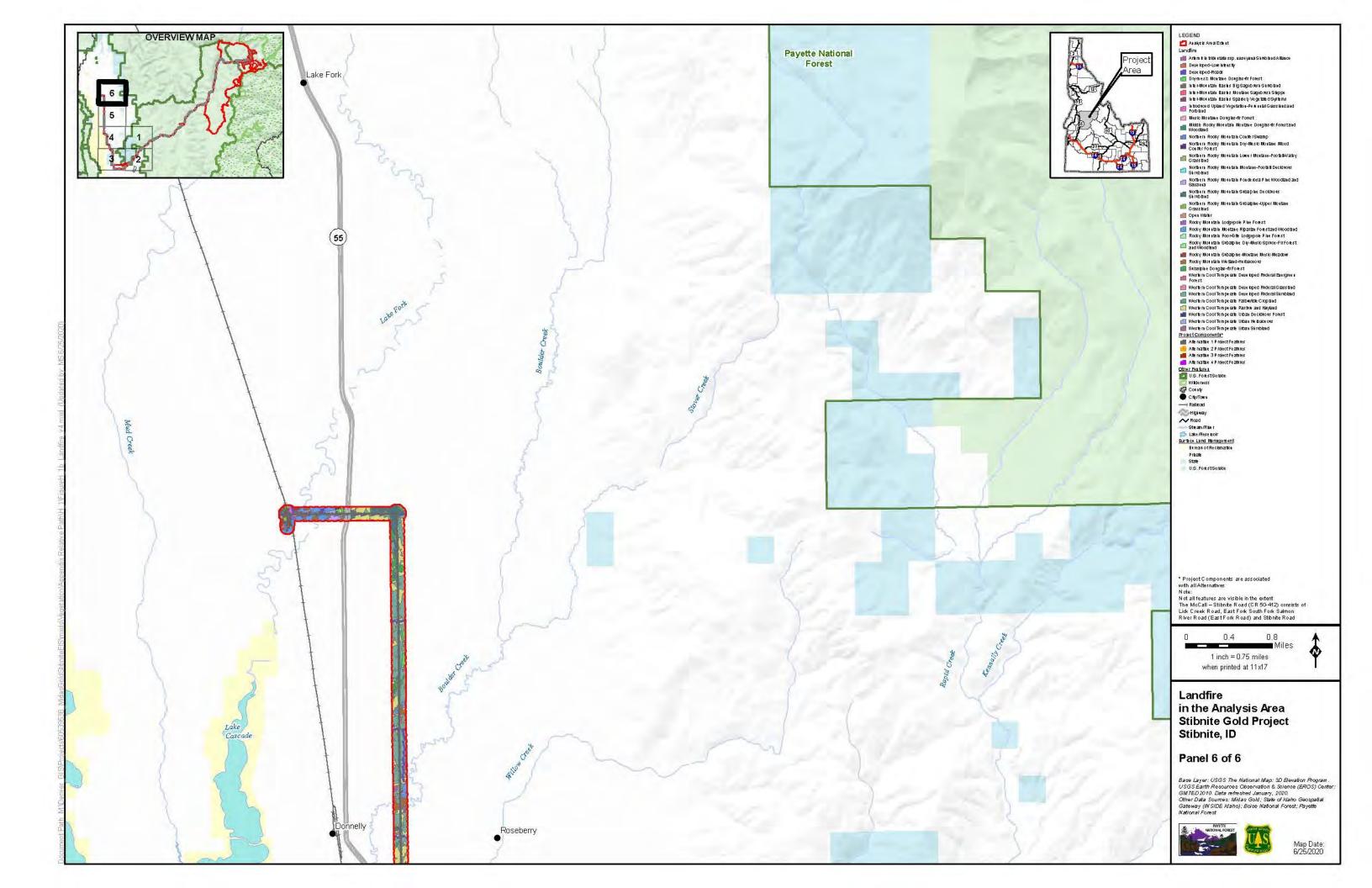




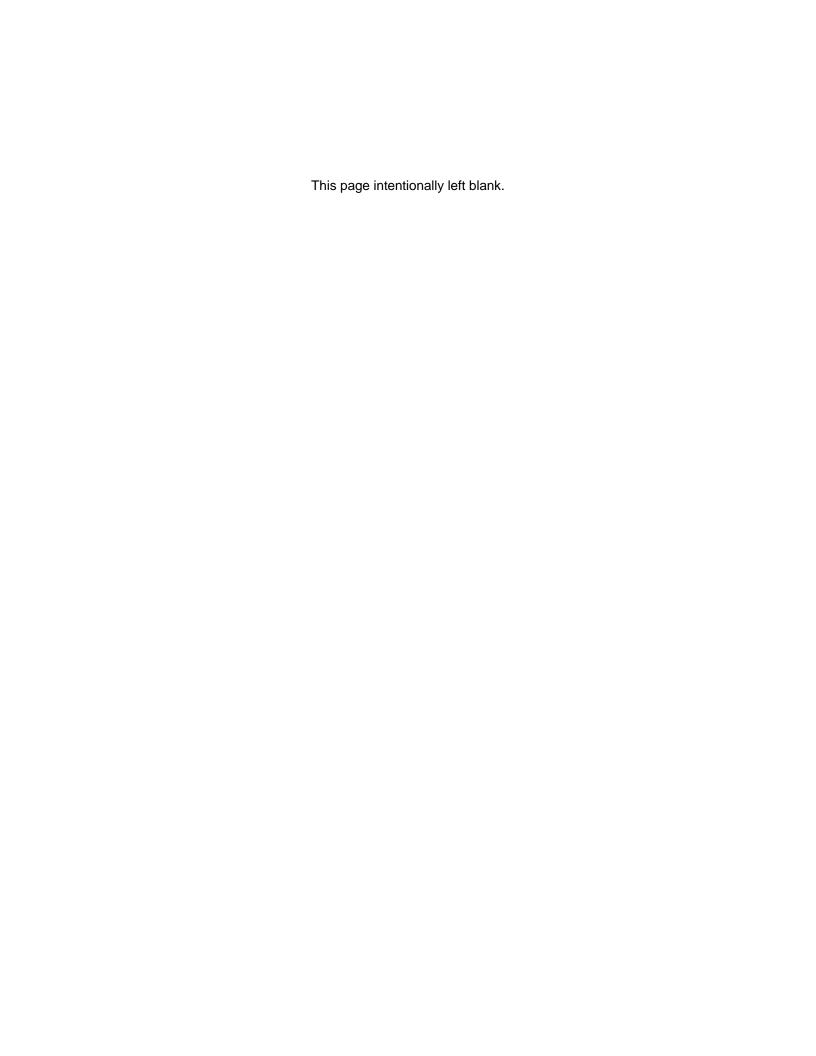


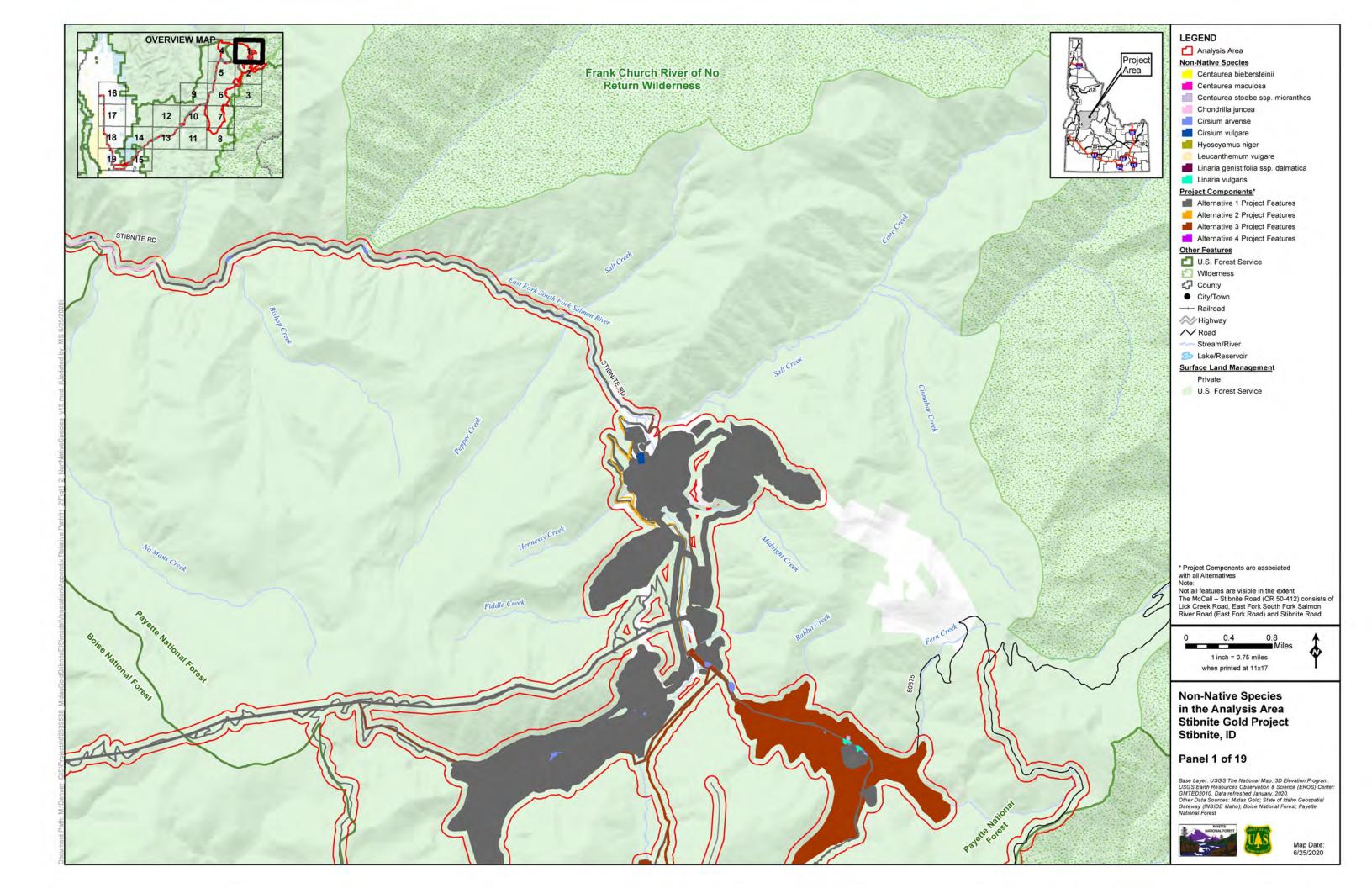


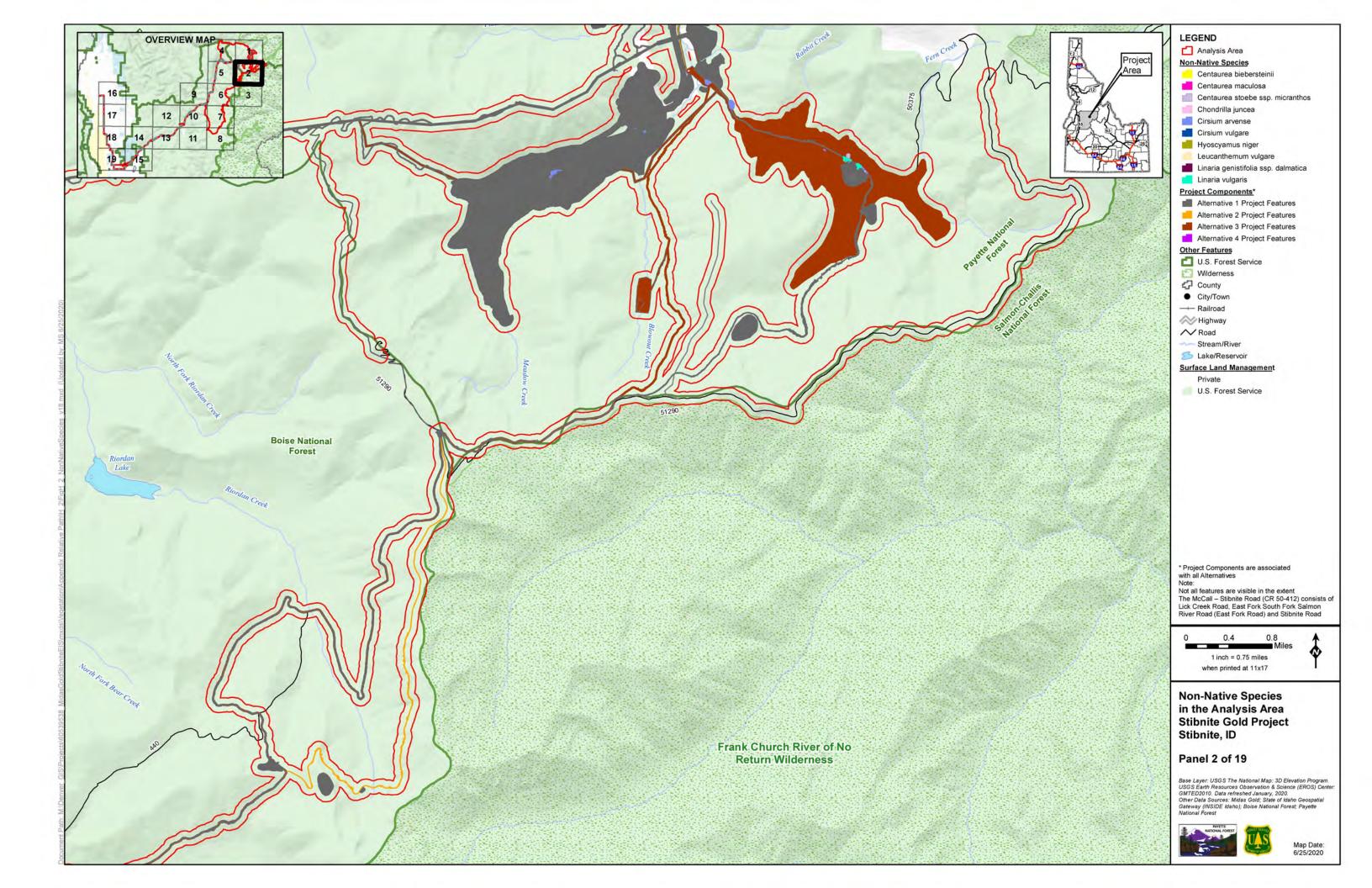


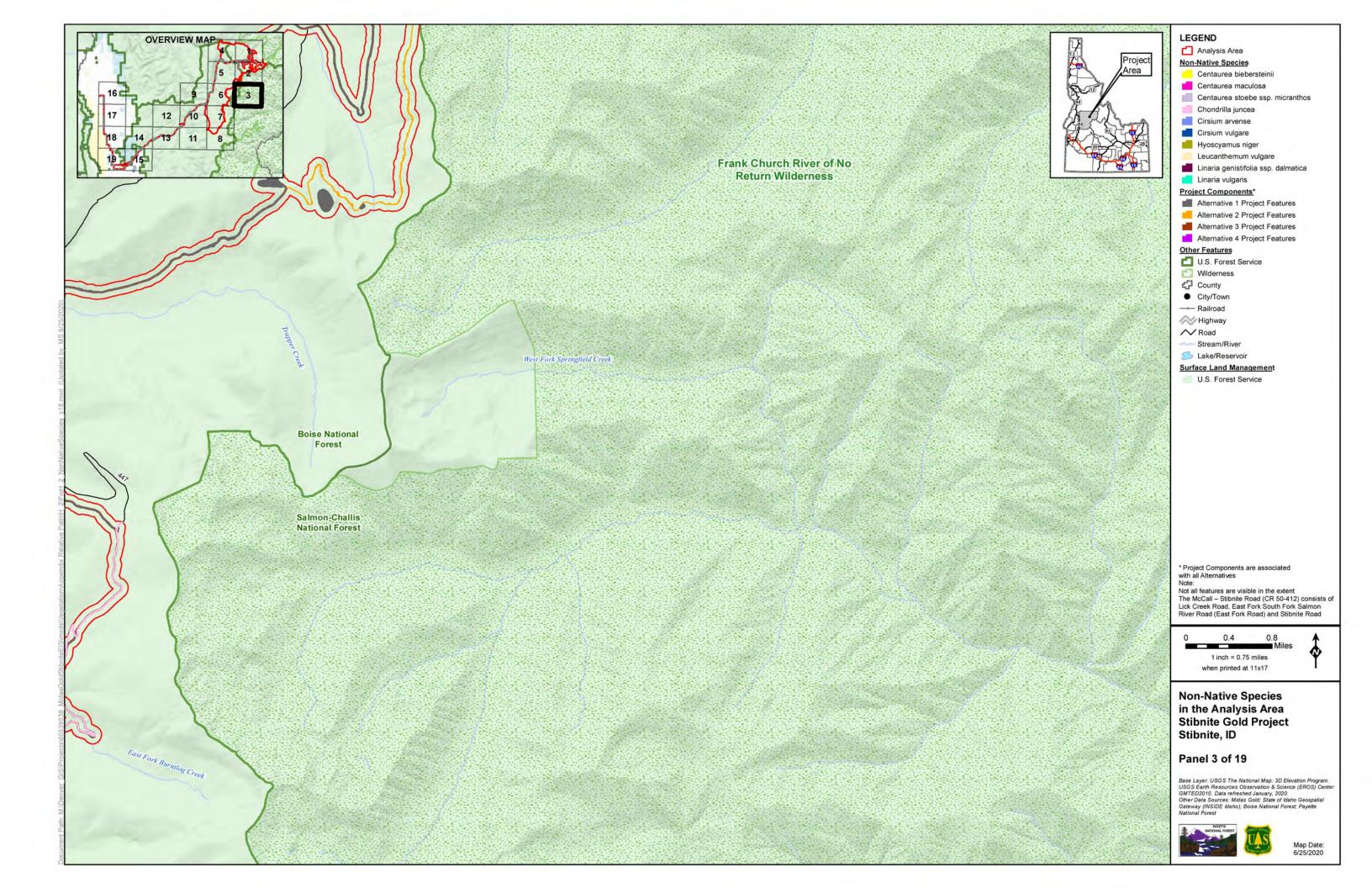


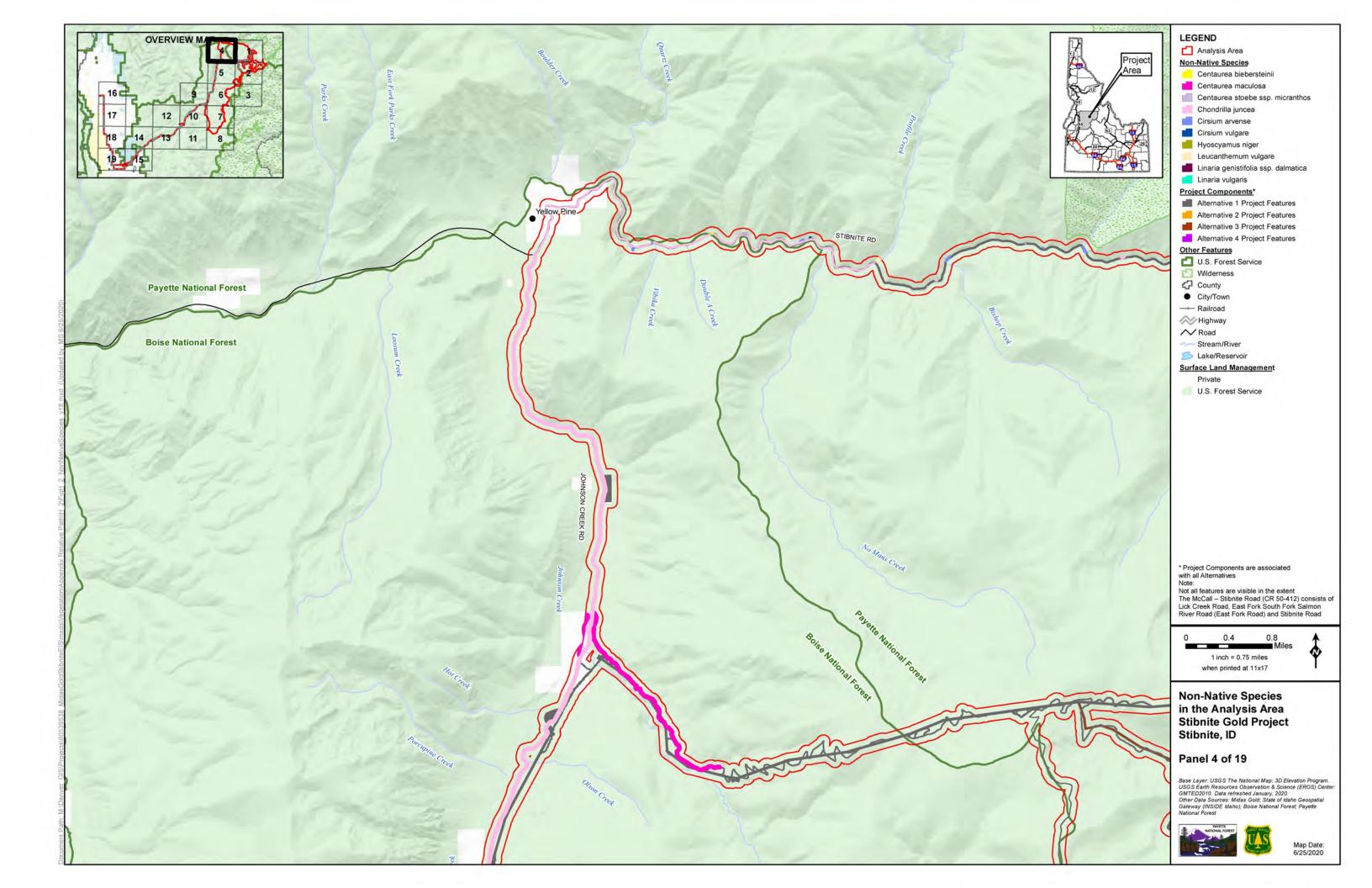
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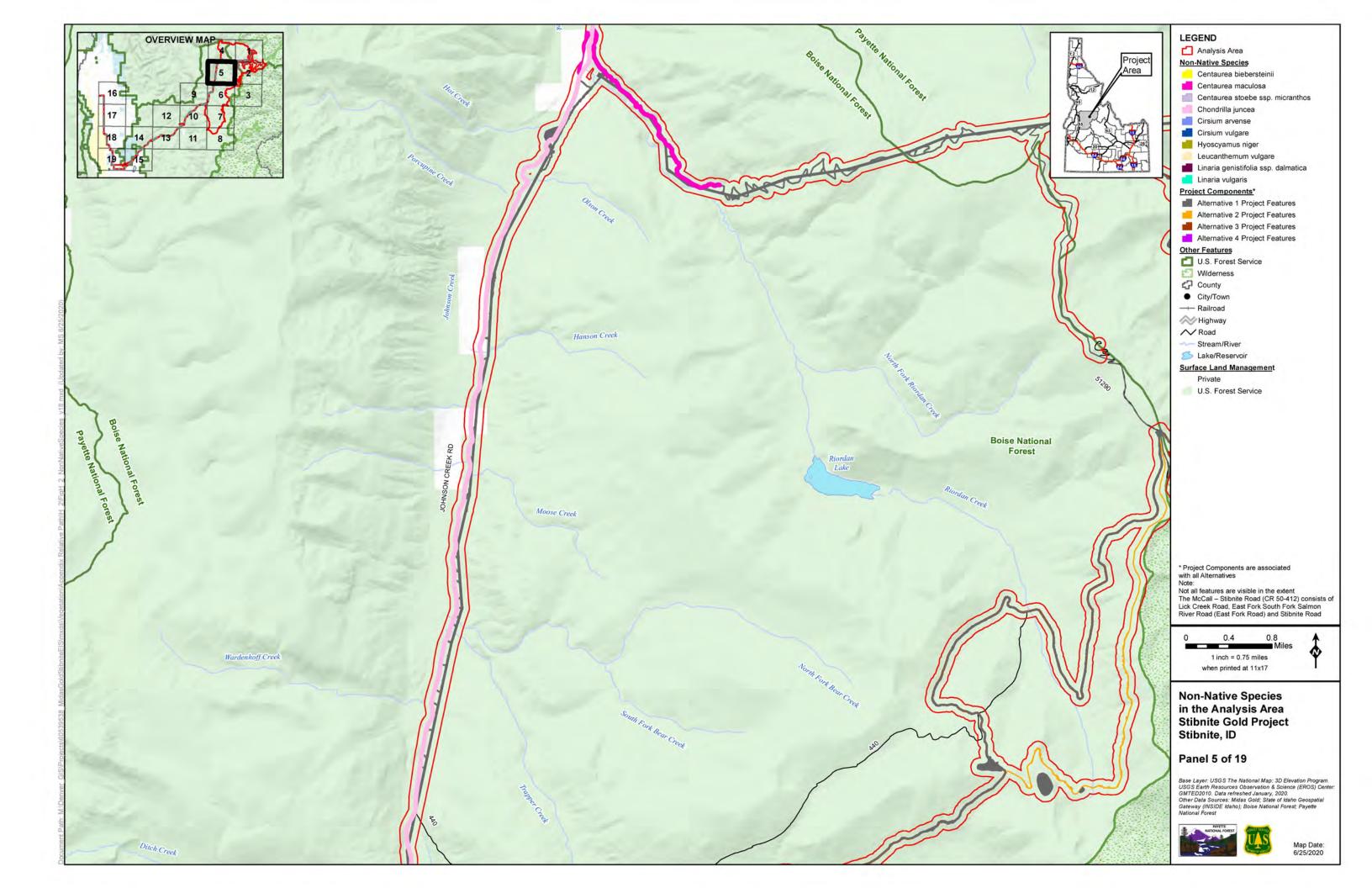


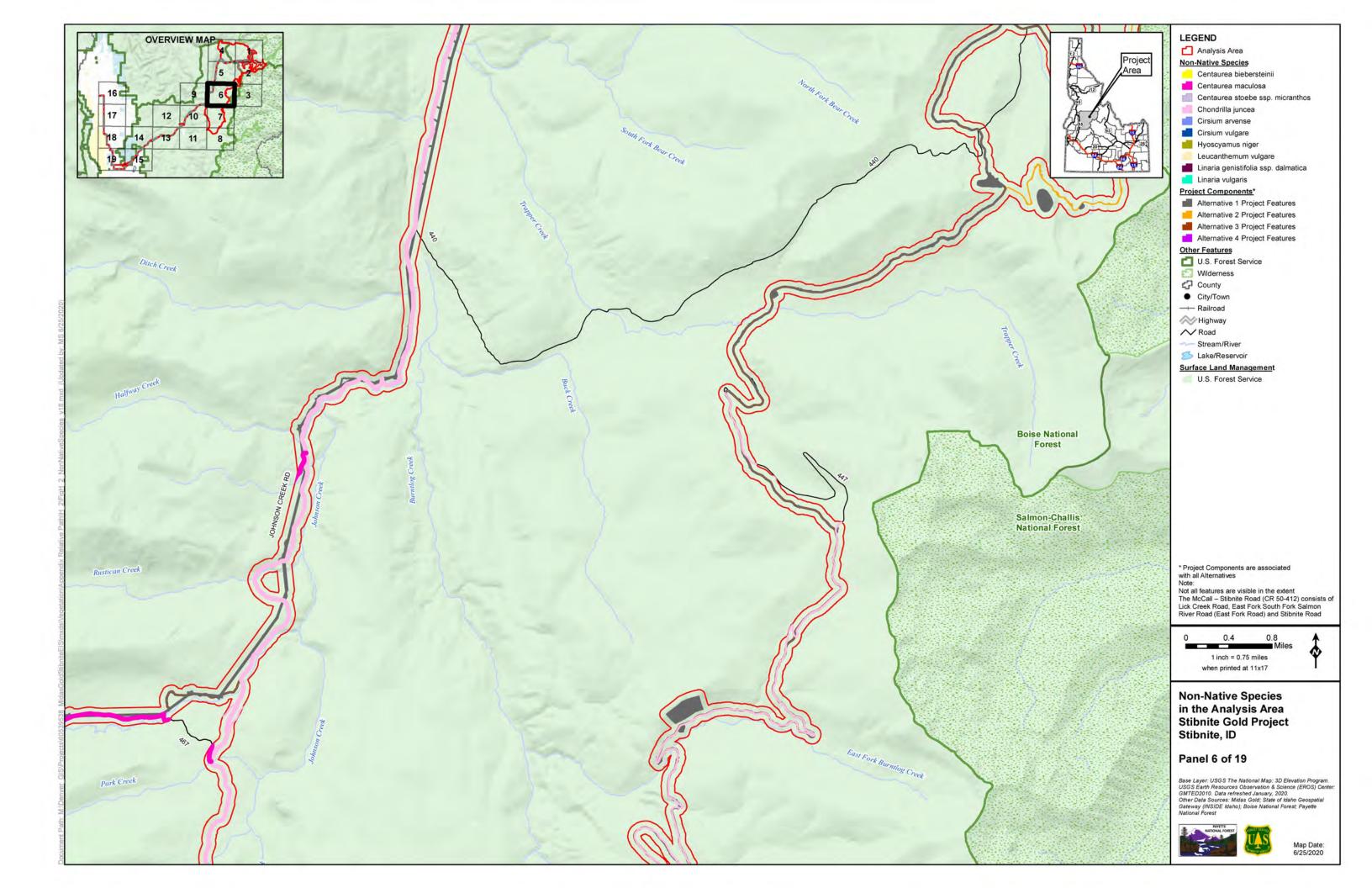


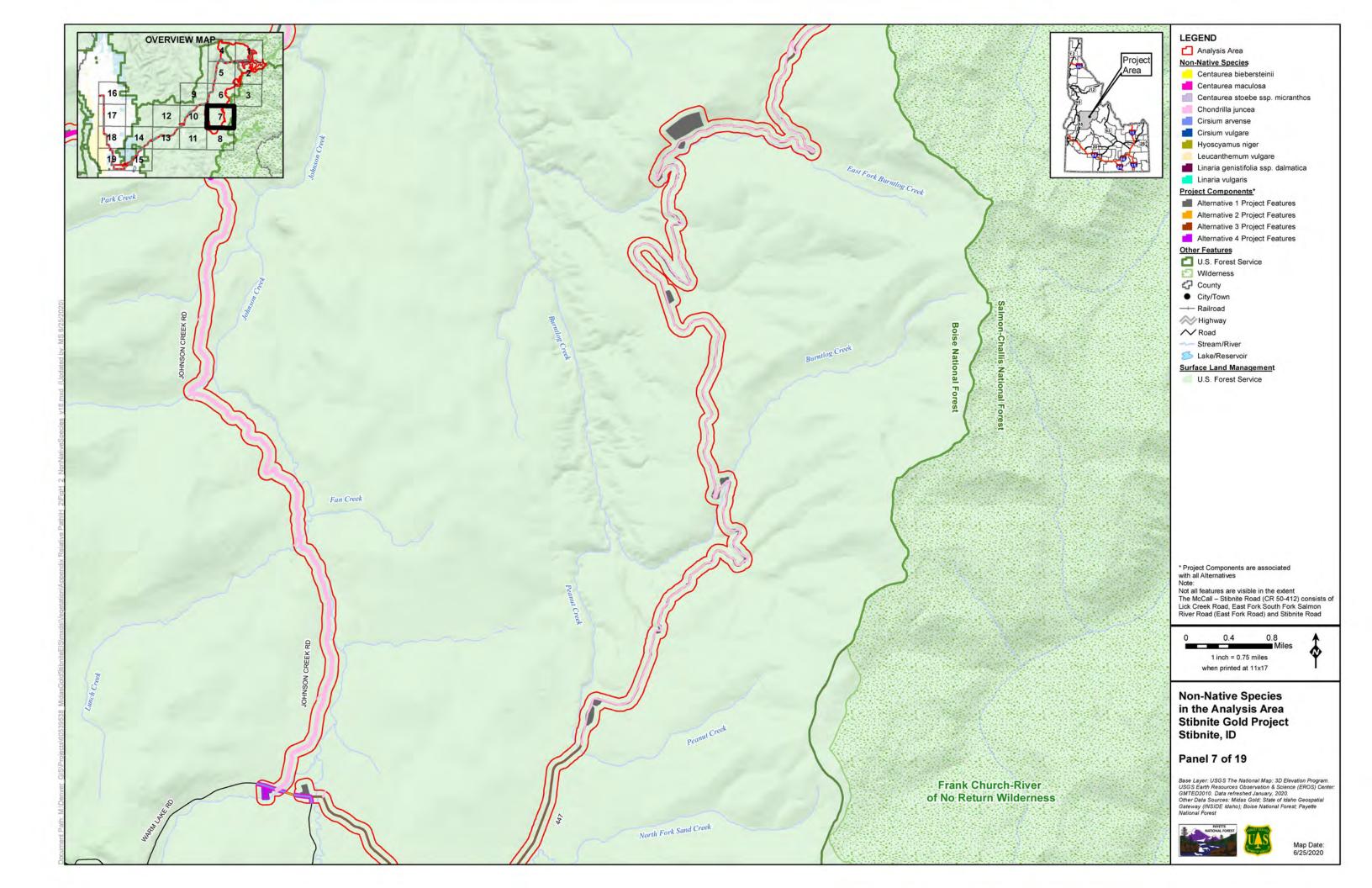


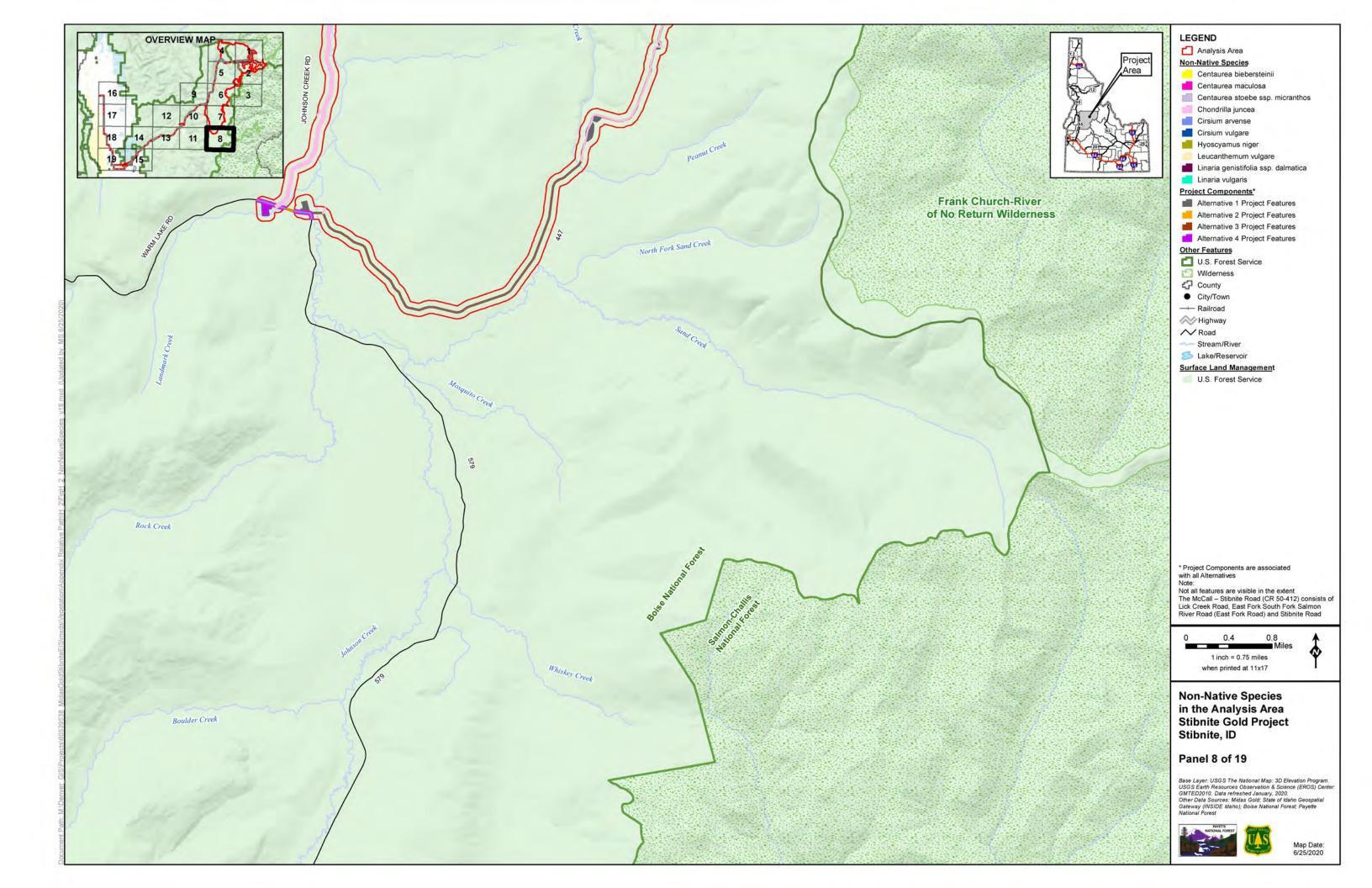


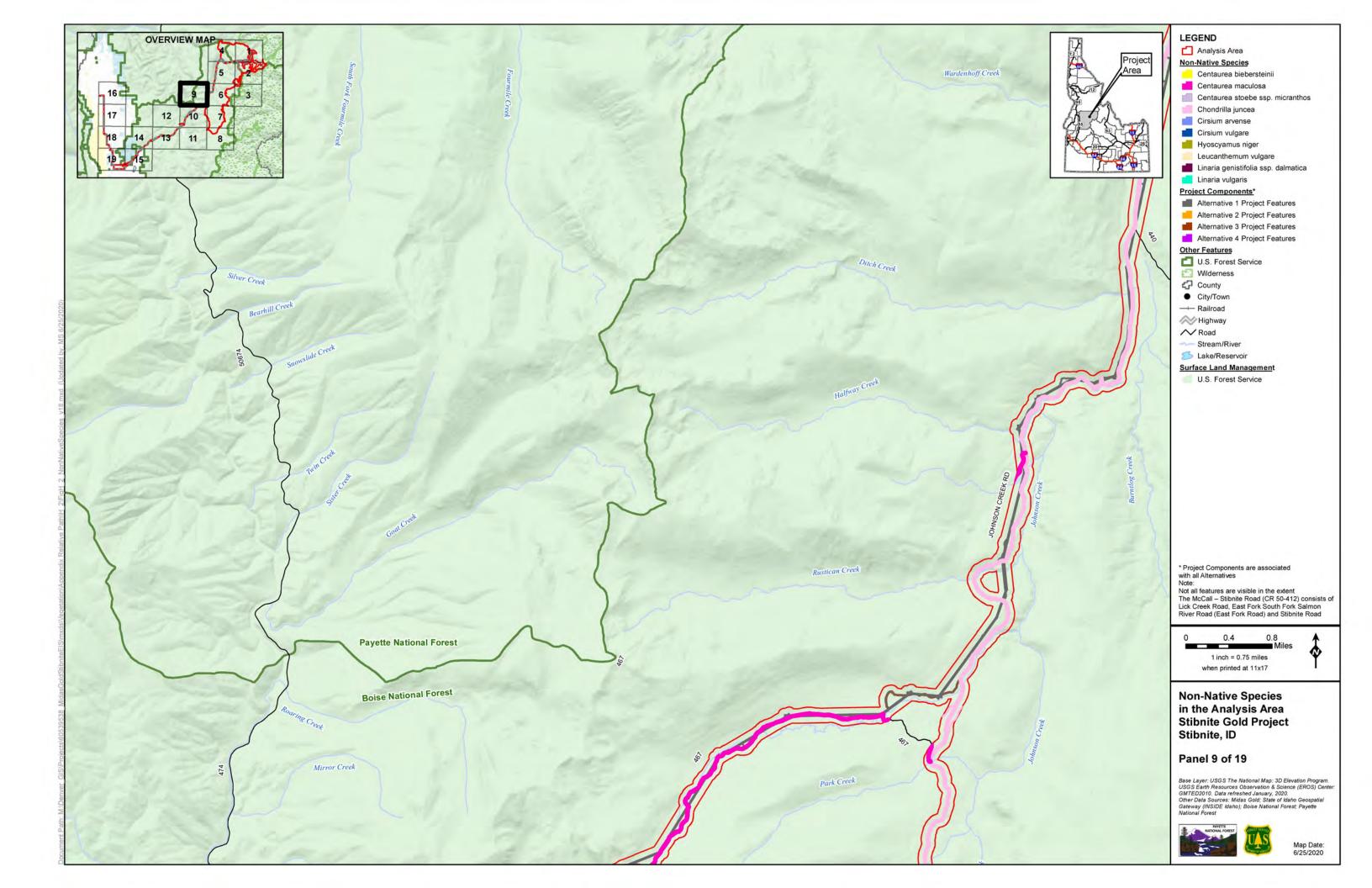


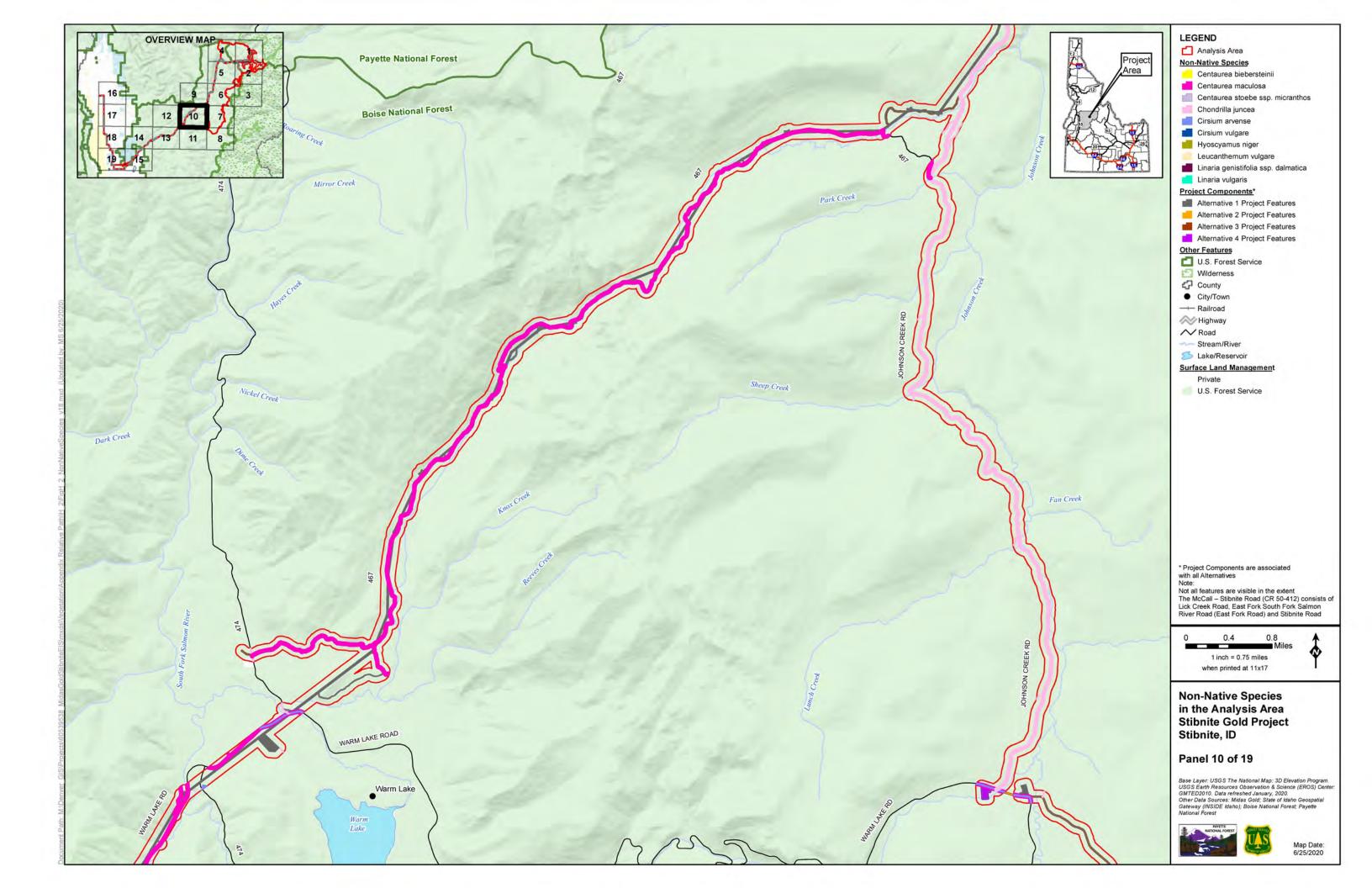


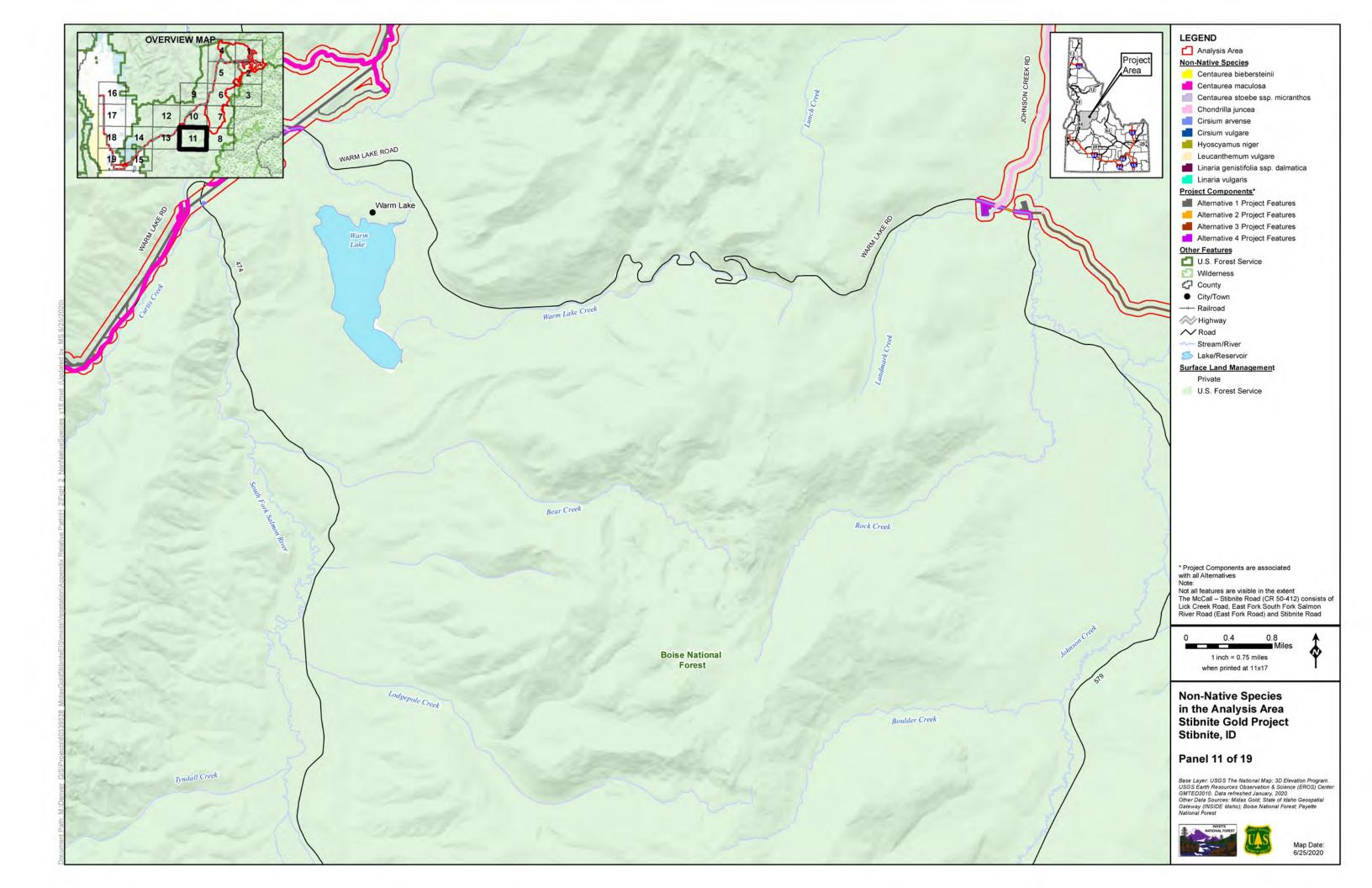


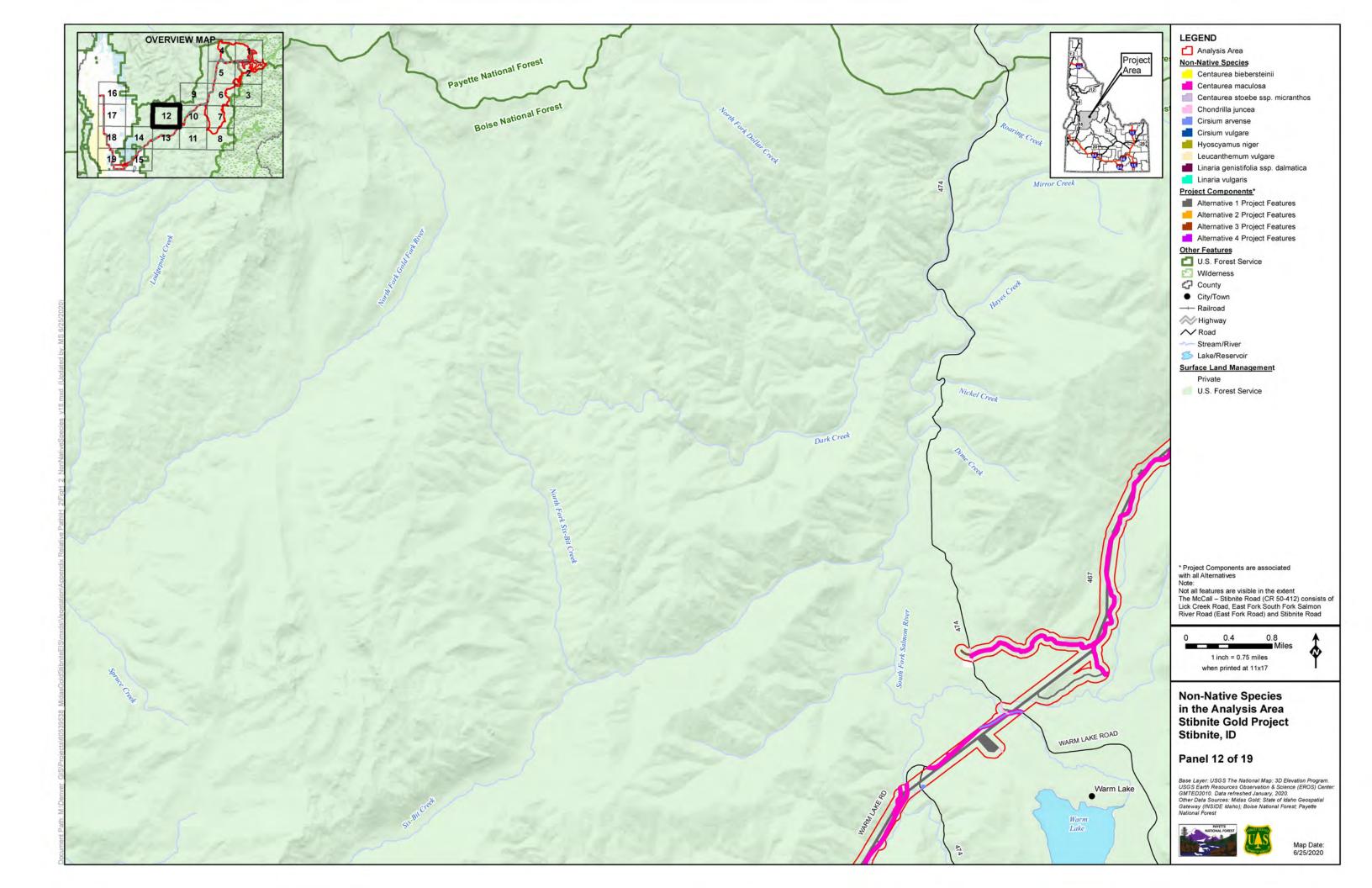


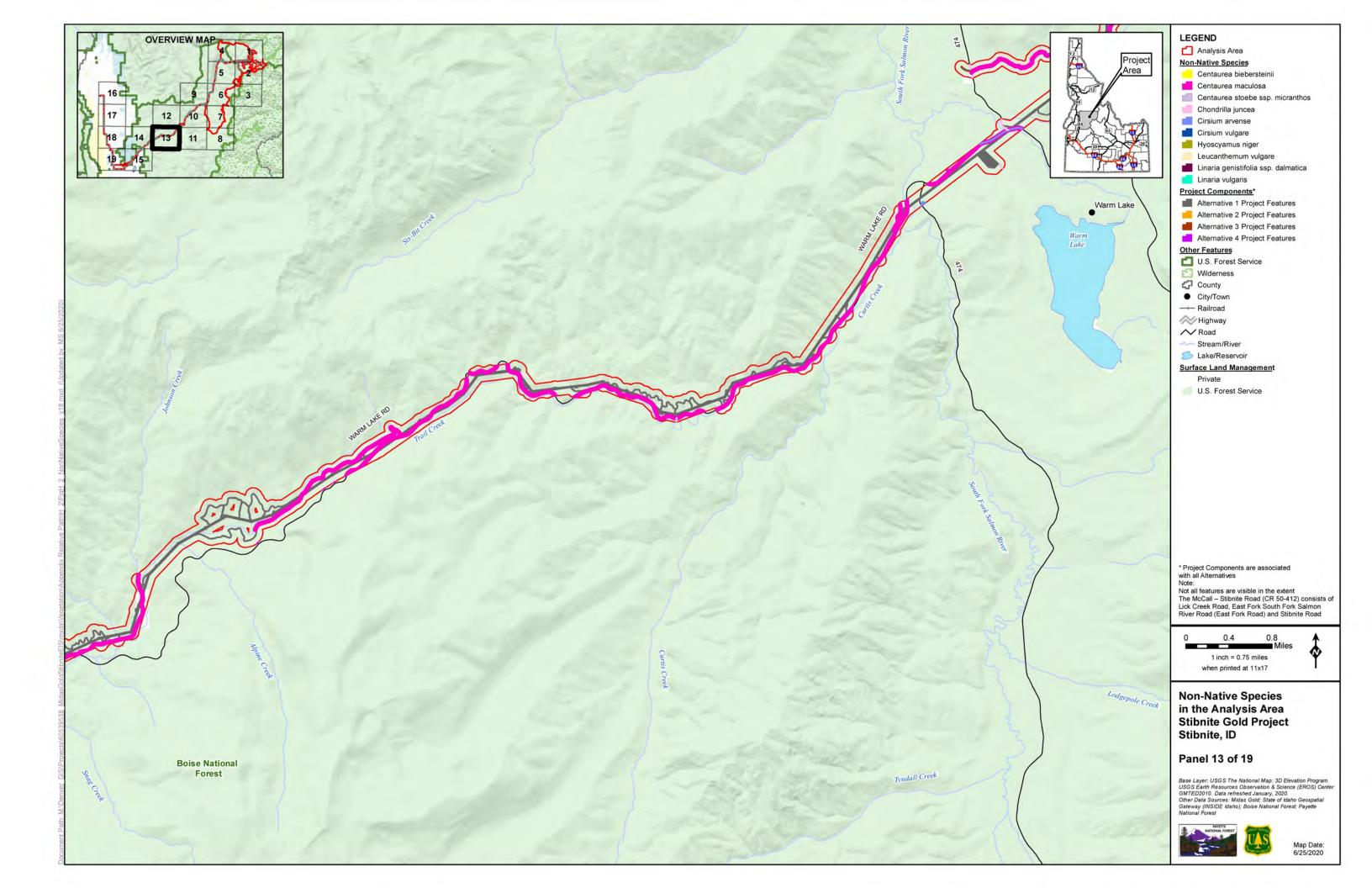


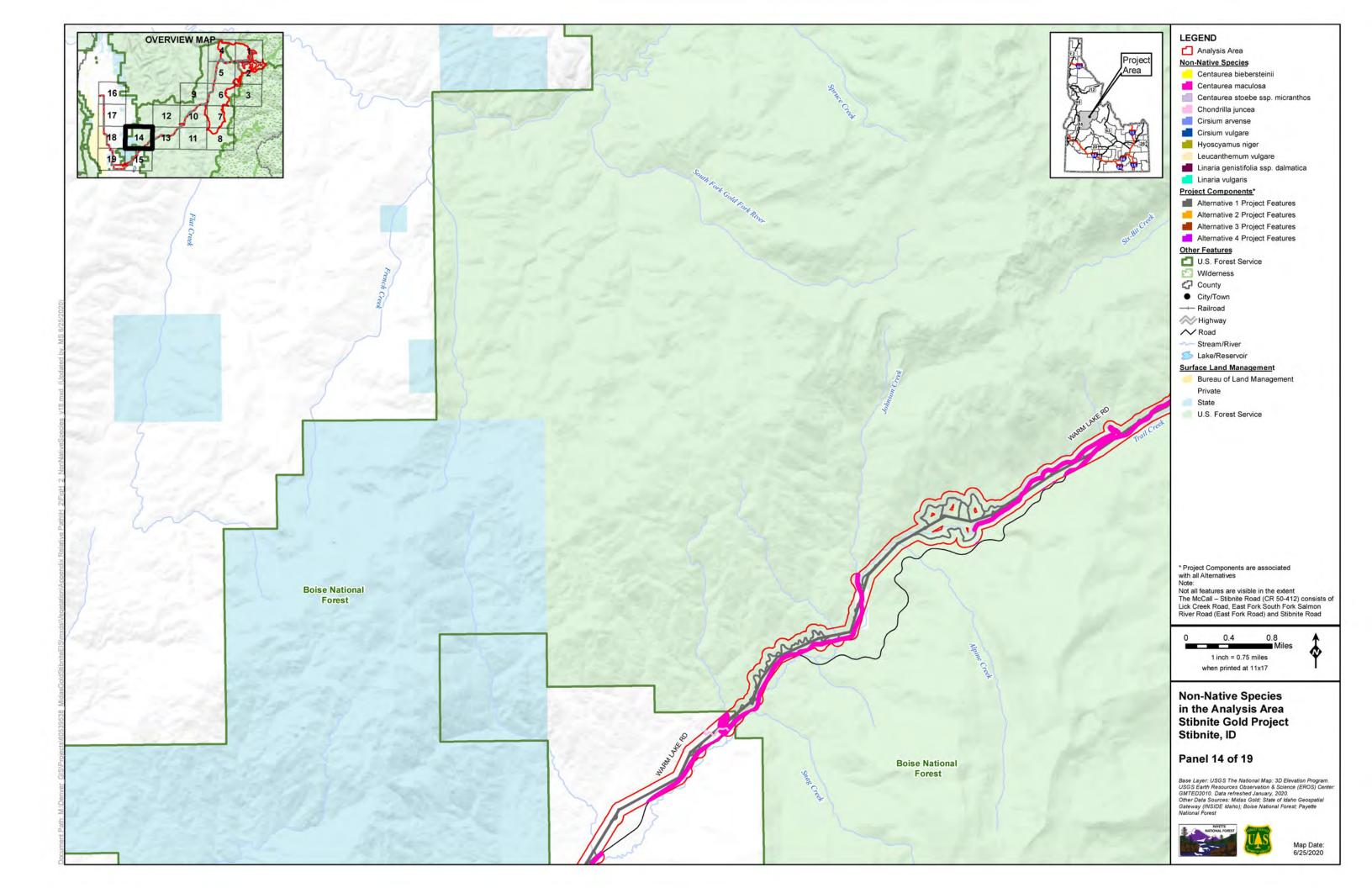


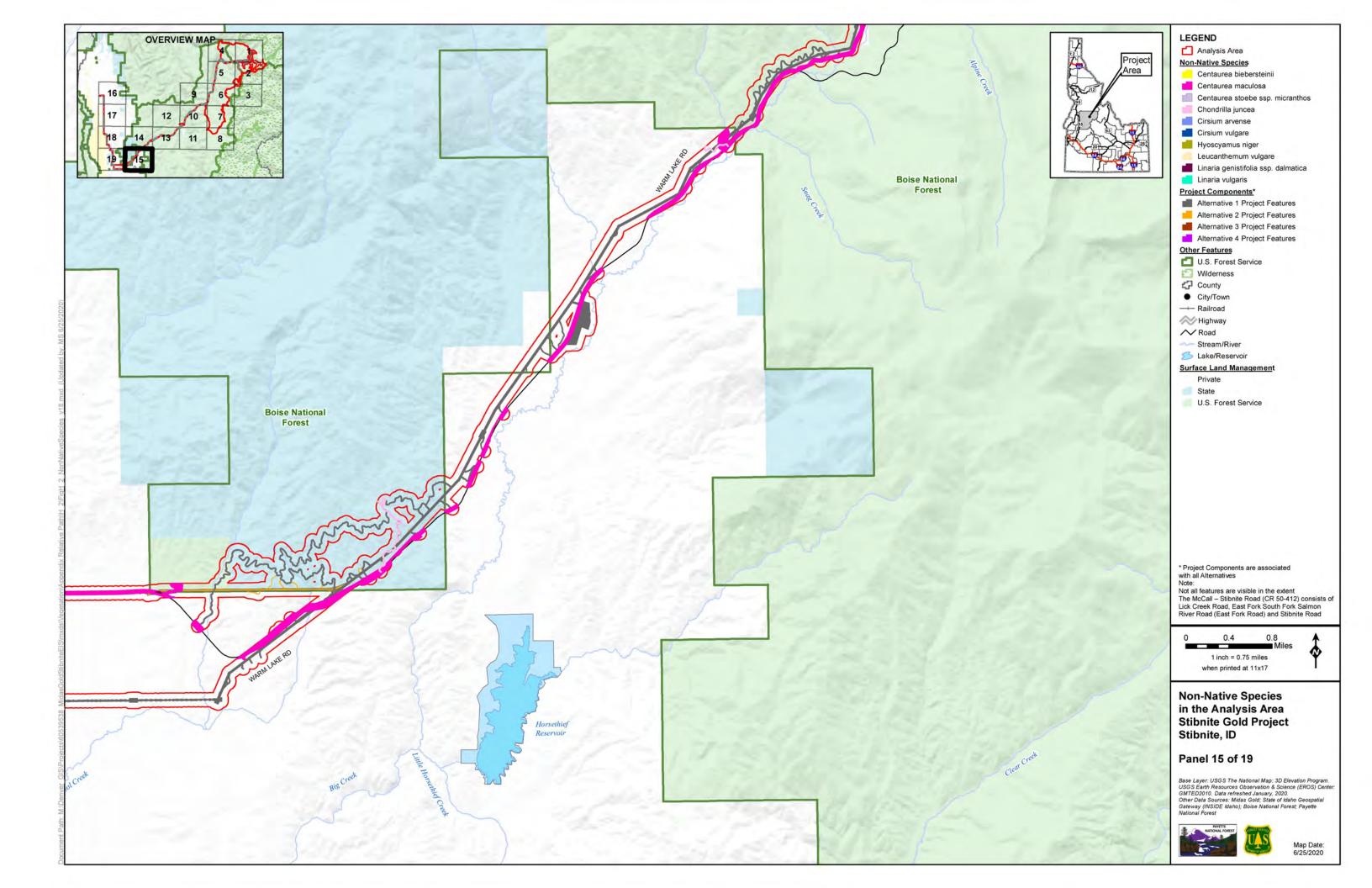


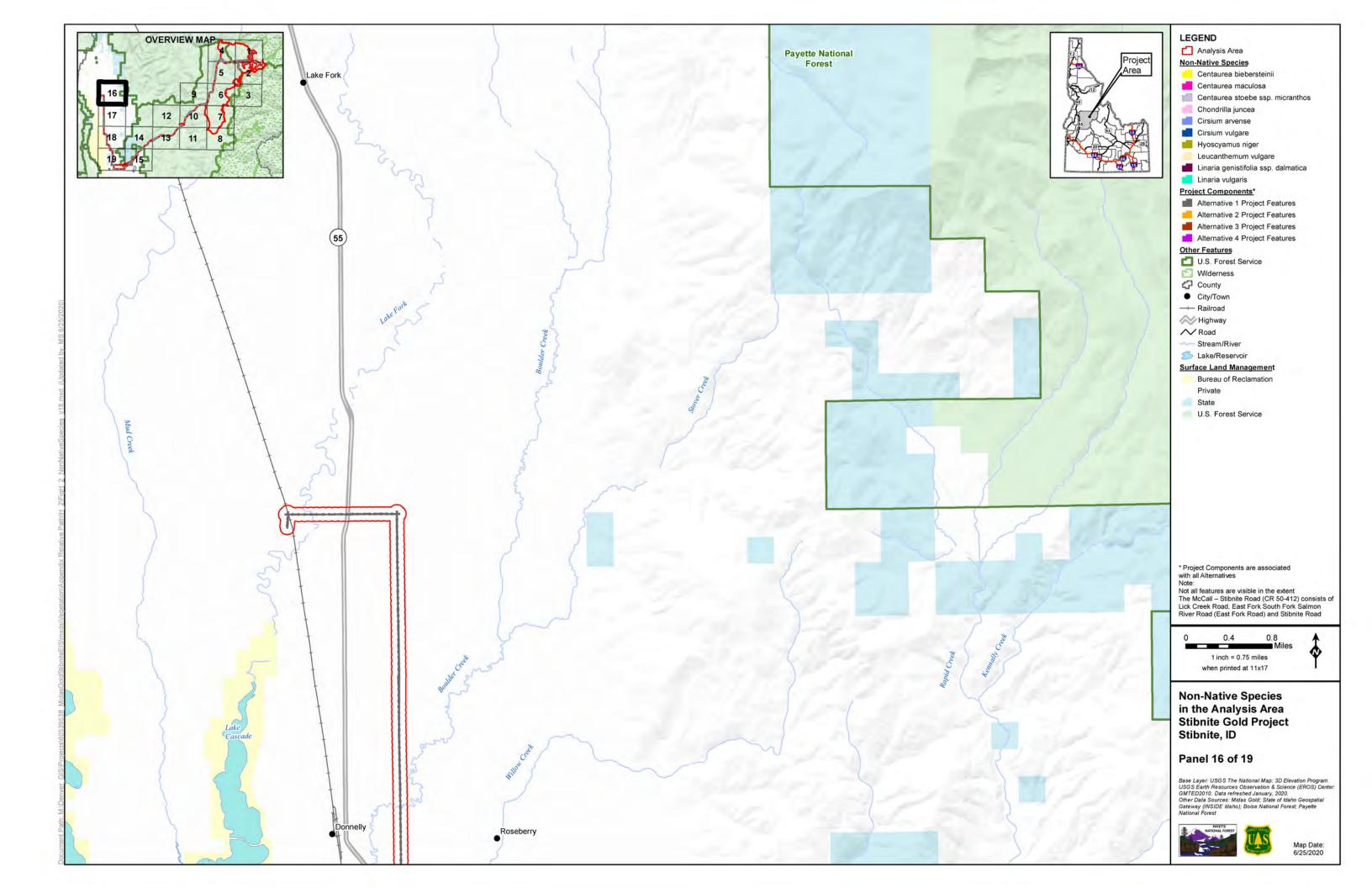


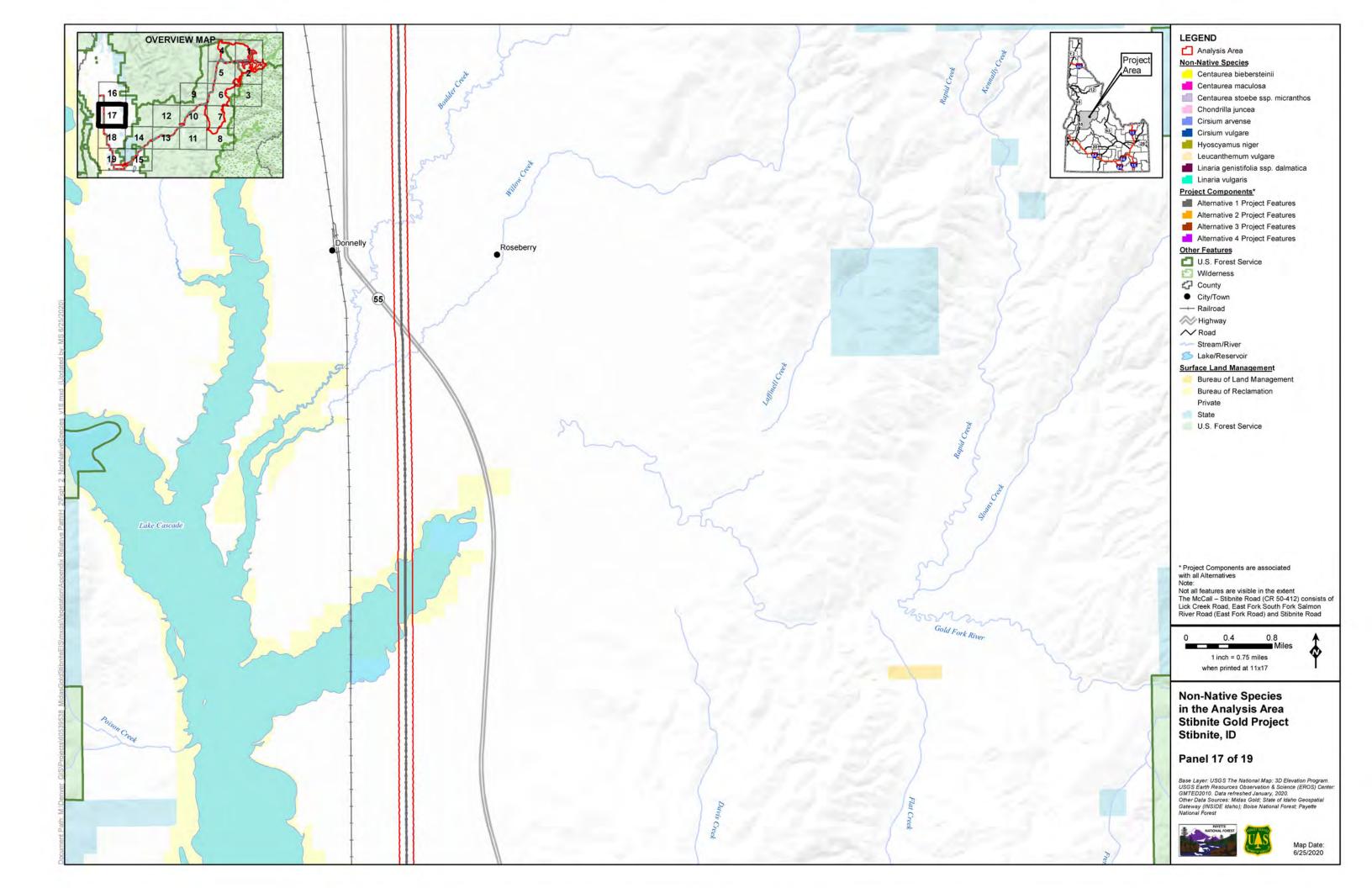


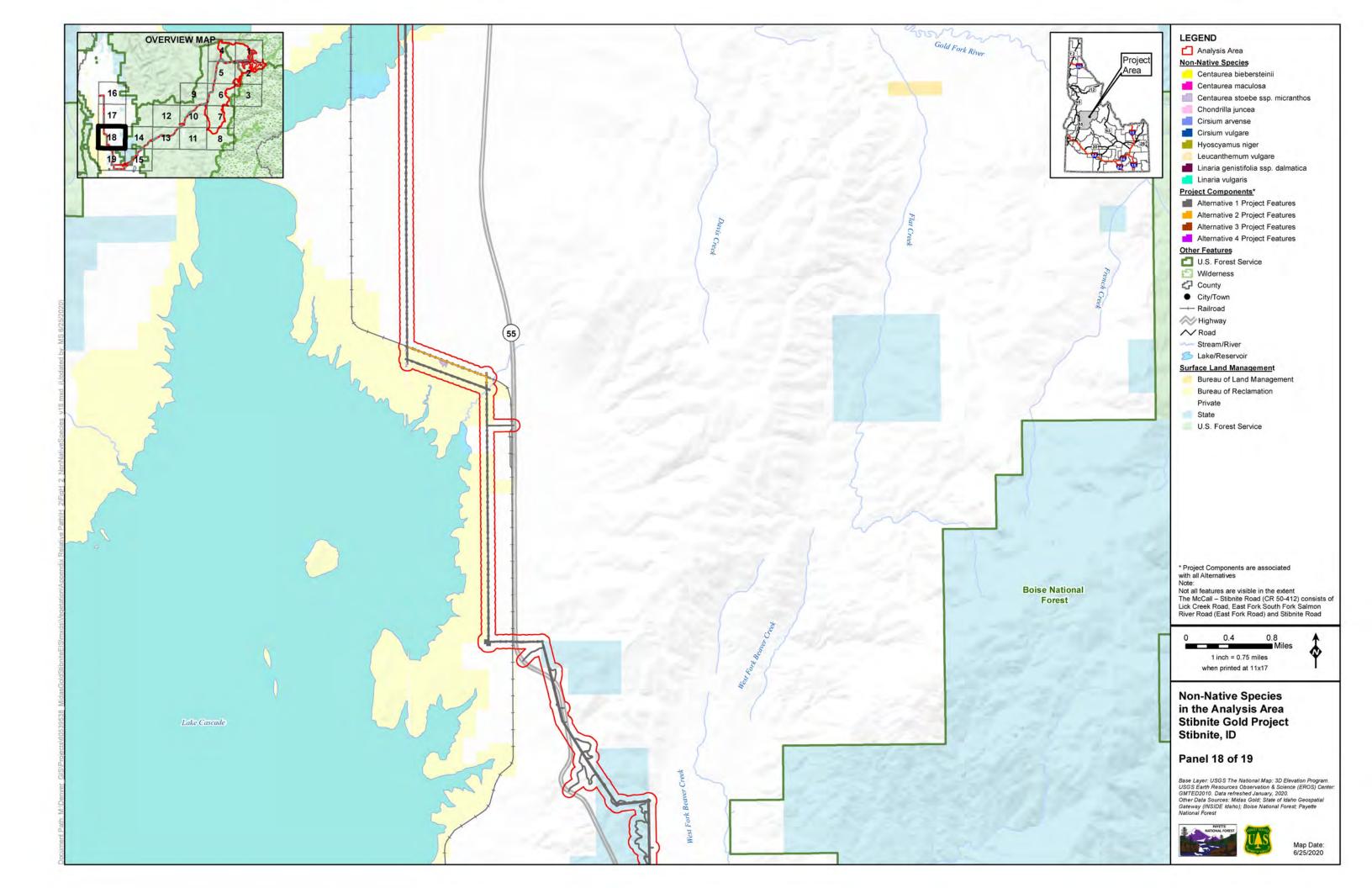


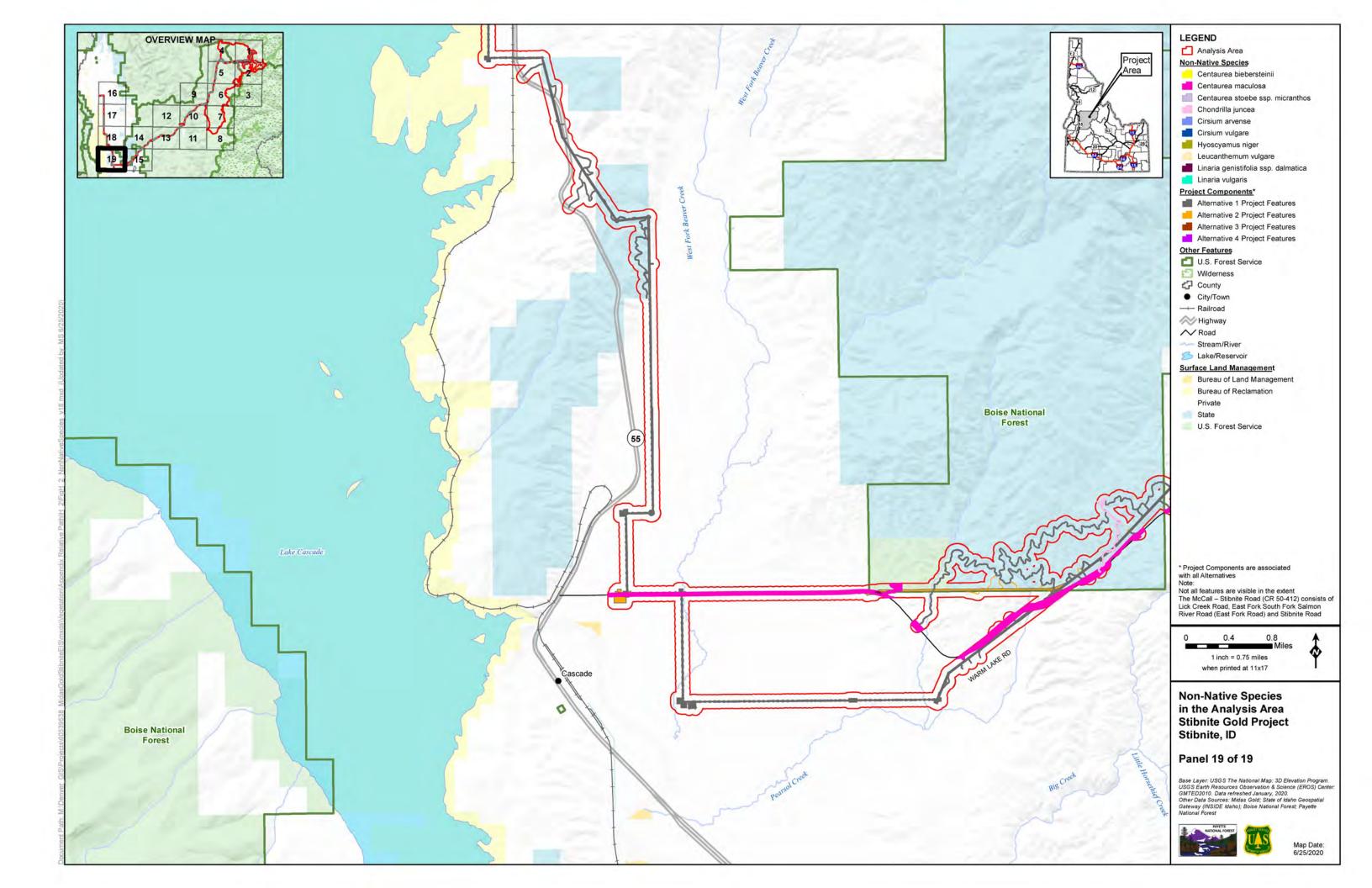




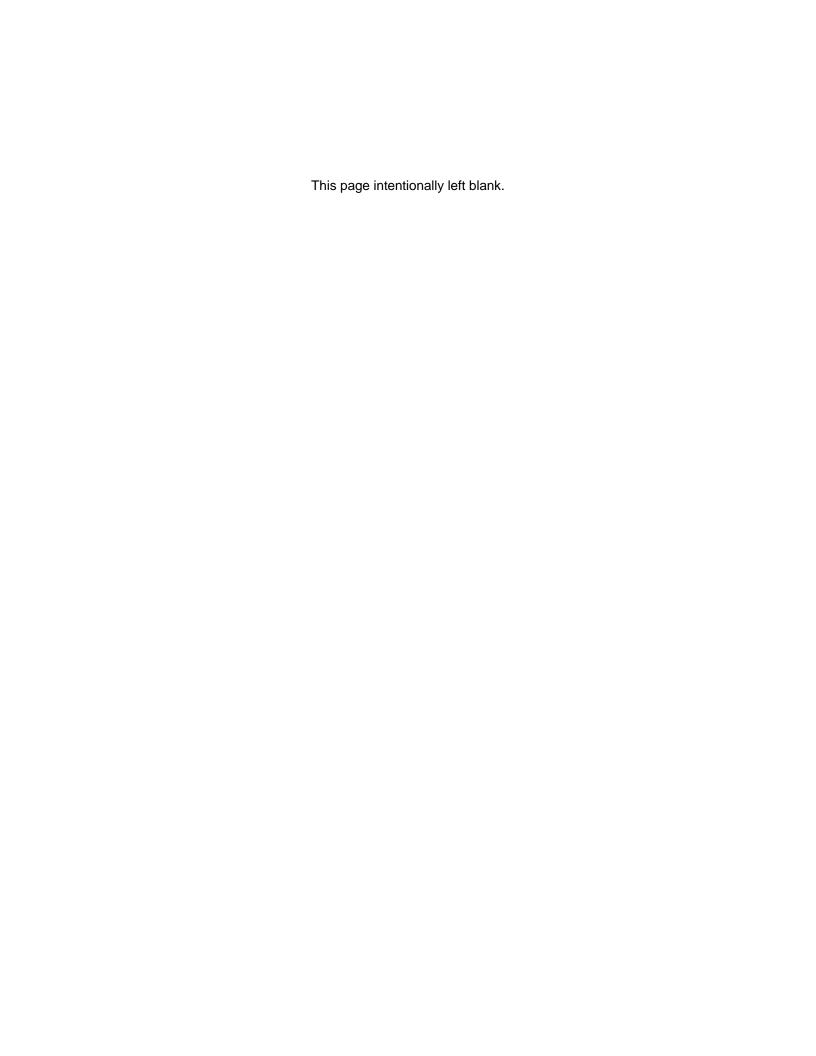








H-3: Information Regarding Special Status Plants that Occur or may Occur in the Anaylsis Area for Vegetation



Appendix H-3

Table H-3-1 Habitat, Range, Occurrence, and Past Survey Information for Special Status Plants that Occur or May Occur in the Analysis Area

Scientific Name	Common Name	State Rank	Status	Species Range	General Habitat Information	Populations ¹ and Past Surveys in Analysis Area ²
Allotropa virgata	Candystick	\$3	Sensitive	Cascade and Coast ranges in British Columbia, Washington, Oregon, and northern California; Rocky Mountains in Idaho (CPNWH 2019).	Found in deep humus or partially decomposed logs, generally in the shaded areas of old growth coniferous forests (Hitchcock and Cronquist 1973; NatureServe Online Database [NatureServe] 2018). In the PNF it is known only from old growth lodgepole pine stands near the town of Warren (Forest Service no date). Typically occurs between 5,000 and 7,000 feet in mature, park-like stands of lodgepole pine with understories dominated by Xerophyllum tenax and Vaccinium scoparium. Lodgepole pine stands in which candystick is found represent a persistent seral stage of the subalpine fir and, to a lesser extent, the grand fir series. The distribution of candystick is tied to a geographic region in which lodgepole pine is the most extensive upland cover type (Lichthardt 1995).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.
Astragalus vexilliflexus var. vexilliflexus	Bent-flowered milkvetch	S1	Forest Watch	Rocky Mountains in Idaho, Montana, and northern Wyoming (CPNWH 2019). The species' main range is southern British Columbia and Alberta to southwestern Montana and western Wyoming, eastward to Saskatchewan and South Dakota (Mancuso 2016).	Idaho populations occur on exposed, subalpine ridgelines in subalpine fir and white bark pine parklands on subalpine ridges and upper slopes and all aspects (Mancuso 2016). Vegetation is very open with low ground cover (Moseley 1994; Mancuso 2016). Occurs on subalpine ridges in subalpine fir and white bark pine habitat from 7,500 to 8,500 feet (Forest Service no date).	Occurrences of this species near the mine site were documented during surveys in 2012, 2013 (HDR 2013, 2014, 2017), and 2016 (Mancuso 2016) (Forest Service 2018).

Scientific Name	Common Name	State Rank	Status	Species Range	General Habitat Information	Populations ¹ and Past Surveys in Analysis Area ²
Botrychium crenulatum	Scalloped moonwort	S1	Sensitive, Forest Watch	Rocky Mountains in British Columbia, Alberta, Washington, Oregon, Idaho, Montana, and Wyoming (CPNWH 2019).	Moist meadows, creek banks, shrub- or treedominated wetlands, springy spots, and wet roadside areas, 3,900 to 8,200 feet (Forest Service no date). Wet, marshy, and springy areas, including marshy meadows, edges of marshes, saturated soils of seeps, bottoms and stabilized margins of small streams, and (occasionally) wet roadside swales, ditches, and drainageways. Sites tend to be partly to heavily shaded and usually have a dense, diverse cover of forbs and graminoids. Dominant plant species may include spruce, alders, and dogwood; this species also has been reported from western red cedar habitats. Often found on soils influenced by reprecipitated calcium. One of the most hydrophilic of Botrychiums. It usually grows in saturated soils of seeps and along the stabilized margins of small streams, often among dense herbaceous vegetation. It also occurs occasionally in seasonally wet roadside ditches and drainage ways. It is usually found in partly shaded to heavily shaded sites at mid to high elevations. At mid to high elevations (montane zone), 3,900 to 8,200 feet (Forest Service 2007a; lowa State University no date; NatureServe 2018).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.
Botrychium lineare	Slender moonwort	S1	Sensitive	Rocky Mountains in Alberta, Washington, Oregon, Idaho, Montana, and Colorado; Alaska Range in Alaska (CPNWH 2019).	Found in a variety of habitats, including meadows, shaded woods and woodlands, grassy horizontal ledges, limestone cliffs, and flat upland sections of river valleys. This species is possibly a colonizer of disturbed, early seral habitats (NatureServe 2018).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.

Scientific Name	Common Name	State Rank	Status	Species Range	General Habitat Information	Populations ¹ and Past Surveys in Analysis Area ²
Botrychium simplex	Least moonwort	52	Sensitive, Forest Watch	Rocky Mountain Range in British Columbia, Alberta, Washington, Oregon, Idaho, Montana and Wyoming; Cascade Range in Washington, Oregon, and California; Sierra Nevada Range in California (CPNWH 2019).	Found in a variety of habitats including meadows, forests, and roadside areas (CNHP 2006; Forest Service 2015, no date), dry fields, marshes, bogs, swamps, and roadside ditches, usually in areas with subacid soils (NatureServe 2018).	Two populations of least moonwort occur in swales adjacent to Johnson Creek Road (Forest Service 2018). This species has not been included in past special status plant surveys for the Project.
Bryum calobryoides	Beautiful Bryum	SH	Sensitive	Rocky Mountains in British Columbia and Washington; Cascade and Coastal ranges in Washington, Oregon, and California (CPNWH 2019). Included in BNF Rare Plant List (Forest Service 2015).	Inhabits low gradient wetlands, moist soil, cliffsides, or rocks at montane to subalpine elevations (Forest Service 2015; Flora of North America 1993+). Habitat varies from somewhat basic to strongly acid (siliceous) rock or moist soil in subalpine and alpine meadows and damp, exposed and protected cliffs at montane elevations with mosses and lichens (Spence 1986).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.
Buxbaumia viridis	Green bug moss	\$3	Forest Watch	Rocky Mountains in British Columbia, Alberta, Washington, Oregon, Idaho, Montana, and Wyoming; Alaska Range in Alaska (CPNWH 2019).	Occurs in mesic forests from 3,500 to 6,500 feet elevation (Forest Service no date). On decorticated wood or humus banks in coniferous forests; high (subalpine) elevations (Flora of North America 1993+).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.

Scientific Name	Common Name	State Rank	Status	Species Range	General Habitat Information	Populations ¹ and Past Surveys in Analysis Area ²
Calamagrostis tweedyi	Cascade reedgrass	52	Sensitive	Rocky Mountain Range in Idaho and Montana; Cascade Range in Washington (CPNWH 2019).	Occurs in subalpine moist meadows often growing at timber edges between 5,000 to 6,500 feet elevation (Forest Service no date). Within montane grasslands, open slopes, open coniferous forests; sometimes in burned areas, clearcuts or on ridges at mid-elevations; subalpine slopes and moist meadows, generally in timber (Hitchcock and Cronquist 1973; NatureServe 2018). In the subalpine fir/beargrass habitat type and mid-seral stands of even-aged lodgepole pine; seems to respond favorably to clear-cutting and burning (Moseley 1988).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.
Carex livida	Livid sedge	S2	Forest Watch	Rocky Mountain, Cascade, and Alaska ranges in Alaska, British Columbia, Alberta, Washington, Oregon, Montana, Idaho, Wyoming, and southern Utah (CPNWH 2019).	Calcareous sphagnum peatlands, fens, bogs, swampy forested riparian types 2,800 to 6,000 feet or greater; mid to high elevation subalpine areas (Forest Service 2015). Peat bogs and swampy woods (NatureServe 2018).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.
Carex straminiformis	Shasta sedge	S2	Forest Watch	Rocky Mountain and Cascade Ranges in Washington, Oregon, California, Idaho, Utah, and Nevada (CPNWH 2019).	Open, rocky, gravelly slopes, often near persistent snowbanks, near or above timberline. 6,500 to 12,000 feet or higher (Forest Service 2015). Subalpine and alpine areas on open slopes often near persistent snowbanks (NatureServe 2018).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.
Cicuta bulbifera	Bulblet- bearing water hemlock	S2	Forest Watch	Rocky Mountain, Cascade, and Alaska ranges in Alaska, British Columbia, Alberta, Washington, Oregon, Montana, Idaho, and Wyoming (CPNWH 2019).	Floating hummocks in marshes, bogs, wet meadows, lake margins, shallow standing water. 4,000 to 6,000 feet, mid to lower elevation lake or peatland habitats on BNF (Forest Service 2015).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.

Scientific Name	Common Name	State Rank	Status	Species Range	General Habitat Information	Populations ¹ and Past Surveys in Analysis Area ²
Douglasia idahoensis	Idaho douglasia	53	Sensitive	Rocky Mountain Range in Idaho (CPNWH 2019).	North/east facing slopes on open, subalpine ridges in whitebark pine and subalpine fir forests, 7,200 to 9,000 feet (Forest Service 2015). Subalpine forest with gravelly soils. Currently not found on PNF but plants known from Gold Fork Area on the BNF (Forest Service no date). Subalpine ridges, summits, and adjacent upper slopes, on gravelly soils derived from granitic parent materials. Most populations occur on northerly-facing slopes; several appear to be restricted to lee sides of ridges, where wind-deposited snow accumulates and lasts later into summer than in adjacent areas. The subalpine vegetation is characterized by open, forb-dominated communities and woodlands with overstories of white-bark pine and subalpine fir. There is often a high proportion of bare ground. Elevation range is about 7,185 to 8,890 feet (NatureServe 2018). On well-drained substrates, generally of rapidly decomposing, granitic scree (Moseley 1990).	One population of this species occurs about ¼ of a mile north of Warm Lake Road in an area west of Warm Lake (Forest Service 2018). This species was not documented by surveyors in 2014 although it was targeted during surveys that year (HDR 2017).
Draba incerta	Yellowstone draba	S2	Forest Watch	Rocky Mountain, Cascade, and Alaska ranges in Alaska (including Seward Peninsula), Yukon, British Columbia, Alberta, Washington, Oregon, Montana, Idaho, and Wyoming (CPNWH 2019).	Historic site near Warren in subalpine high elevation terrain between 7,900 to 9,500 feet (Forest Service no date). Rock outcrops, talus, gravelly areas, tundra; 0 to 10,830 feet (Flora of North America 1993+).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.
Drosera intermedia	Spoonleaf sundew	S1	Forest Watch	Rocky Mountain Range in Idaho (CPNWH 2019).	Bogs, sphagnum dominated fens, and moist acid, sandy soils; often with livid sedge and fewflower spikerush (<i>Eleocharis pauciflora</i>) (Forest Service 2015).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.

Scientific Name	Common Name	State Rank	Status	Species Range	General Habitat Information	Populations ¹ and Past Surveys in Analysis Area ²
Epilobium palustre	Swamp willow weed	53	Forest Watch	Rocky Mountain, Cascade, Alaska, and Brooks ranges in Alaska (including Seward Peninsula), Yukon, Northwest Territories, British Columbia, Alberta, Washington, Oregon, Montana, Idaho, and Wyoming (CPNWH 2019).	Wet meadows, stream and seep areas from Ponderosa pine habitat to subalpine fir from 2,800 to 6,200 feet in elevation. Reported from Squaw meadows (Forest Service no date).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.
Epipactis gigantea	Giant helleborine orchid	\$3	Forest Watch	Rocky Mountain, Cascade, Coastal, and Sierra Nevada ranges in British Columbia, Alberta, Washington, Oregon, Idaho, Montana, Nevada, Utah, and California (CPNWH 2019).	Moist areas such as springs, streambanks, seeps and thermal sites between 2,800 to 5,300 feet elevation (Forest Service no date). Wet gravelly and sandy stream shores and bars, may occur in riparian willow, box elder, and river birch woodlands or in chaparral, seepages, marshes, wet cliffs, hot springs; 0 to 9,850 feet (Flora of North America 1993+).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.

Scientific Name	Common Name	State Rank	Status	Species Range	General Habitat Information	Populations ¹ and Past Surveys in Analysis Area ²
Helodium blandowii	Blandow's helodium	52	Forest Watch	Rocky Mountain, Cascade, Alaska, and Brooks ranges in Alaska, Yukon, British Columbia, Alberta, Washington, Oregon, Montana, Idaho, and Wyoming (CPNWH 2019).	Mats and hummocks in montane peatlands, fens, and bogs; under sedges and shrubs or along streams in mires (Forest Service 2015). Occurs in wetlands and along streams between 3,900 to 6,600 feet elevation in and at edges of conifer forests on the eastside of PNF (Forest Service no date). Forming mats and small hummocks in medium to rich montane fens with calcareous groundwater. Sometimes under sedges and shrubs around the edges of fens or along streamlets in fens. Elevations range from 5,000 to 6,000 feet (Forest Service 2007b).	One population of Blandow's helodium occurs near Trapper Creek within 300 feet of what would be new construction for Burntlog Route (Forest Service 2018). Another population of this species occurs within ¼ mile of the Project in an area downslope of Warm Lake Road between the road and Warm Lake (Forest Service 2018). This species has not been included in past special status plant surveys for the Project.
Hierochloe odorata	Sweetgrass	S1	Forest Watch	Rocky Mountain, Cascade, Alaska, and Brooks ranges in Alaska (including Seward Peninsula), Yukon, British Columbia, Alberta, Washington, Oregon, Montana, Idaho, Wyoming, and Utah (CPNWH 2019).	Moist slopes, meadows and streambanks from the foothills to subalpine elevations (Forest Service 2015). Moist soil of lower montane to subalpine meadows and slopes (Hitchcock and Cronquist 1973). Edges of sloughs and marshes, bogs, shaded streambanks, lakeshores, and cool mountain canyons (Walsh 1994).	One population of sweetgrass is near Trapper Creek within ¼ mile of what would be new construction for Burntlog Route (Forest Service 2018). This species has not been included in past special status plant surveys for the Project.

Scientific Name	Common Name	State Rank	Status	Species Range	General Habitat Information	Populations ¹ and Past Surveys in Analysis Area ²
Lewisia sacajaweana	Sacajawea's bitterroot	S1	Sensitive	Rocky Mountains in Idaho (CPNWH 2019). Just over two dozen populations of Sacajawea's bitterroot are known to exist, roughly three-fourths of them on the BNF (Forest Service 2014).	Relatively sparse upper slopes and ridgetops in montane and subalpine habitats (Forest Service 2015; NatureServe 2018). Fractured bedrock, granitic soils near late snowbanks, 5,400 to 9,500 feet (Forest Service 2015). Mostly bare subalpine woodlands and open ridges but also in Ponderosa pine habitat from 4,500 to 6,500 feet in elevation (Forest Service no date).	One population of this species is documented in the analysis area north of the existing powerline corridor and Warm Lake Road, east of the Warm Lake area (Forest Service 2018). This species was not documented by surveyors in 2014 although it was targeted during surveys that year (HDR 2017).
Mimulus clivicola	Bank monkeyflower	S3	Sensitive	Rocky Mountain Range in Idaho and eastern Oregon; Cascade Range in Oregon (CPNWH 2019).	Open pockets of moist, exposed mineral soil in forest gaps in Adams County where early spring moisture is available between 3,200 and 5,600 feet elevation (Forest Service no date). Open pockets of moist, exposed mineral soil created by natural disturbances (erosion, big-game activity, etc.) or human-caused disturbances (roadcuts, etc.). They are almost exclusively found on southern exposures (southeast, south, southwest) with steep slopes (generally >60%) in microhabitats that hold moisture during the spring (Lorain 1993).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.
Penstemon laxus	Tufted penstemon	S2	Forest Watch	Rocky Mountain Range in Idaho (CPNWH 2019).	Dry meadows, sagebrush slopes and swales, and open to sparsely wooded slopes; in the foothills to moderate elevations in the mountains. Around 5,900 feet (NatureServe 2018).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.

Scientific Name	Common Name	State Rank	Status	Species Range	General Habitat Information	Populations ¹ and Past Surveys in Analysis Area ²
Pinus albicaulis	Whitebark	S3	ESA Candidate; Sensitive	Summary in NatureServe 2018: From west-central British Columbia east to west-central Alberta and south to central Idaho, southwestern Wyoming, and southern California. Its distribution is split into two broad sections, one following the Coast and Cascade ranges and the Sierra Nevada, and the other following the northern Rocky Mountains, with scattered populations occurring between the two sections in Great Basin regions of eastern Washington and Oregon and northern Nevada.	Cold, windy, high-elevation or high-latitude sites in western North America, usually on steep slopes at alpine tree lines and in subalpine areas (USFWS 2017; BLM 2016, Arno and Hoff 1989). In moist mountain ranges, whitebark pine is most abundant on warm, dry exposures; but in semiarid ranges, it becomes prevalent on cool exposures and moist sites (Arno and Hoff 1989).	Surveys in 2012, 2013, and 2014 documented whitebark pine at the proposed mine site and along Burntlog Road and several existing roads, including Riordan Lake Road and Meadow Creek Lookout Road, and along the existing Old Thunder Mountain Road, and within the proposed power line corridor, especially between Johnson Creek Road and the mine site (HDR 2013; 2014; 2017). Surveys for this species occurred in 2019.
Polystichum kruckebergii	Kruckeberg's Sword-fern	52	Forest Watch	Rocky Mountain, Cascade, and Coastal ranges in British Columbia, Washington, Oregon, Idaho, Montana, northern Nevada, and northern Utah (CPNWH 2019).	Rocks and cliffs in subalpine to alpine habitats; 4,900 to 10,500 feet (Forest Service 2015). High elevation ridgetops and cirques in subalpine fir zone and above between 5,000 to 7,500 feet elevation. Known from White Rock Peak on south Fork Salmon River (Forest Service no date). Subalpine cliffs and talus slopes. The species should be looked for on ultrafamic rocks (NatureServe 2018).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.
Rhynchospora alba	White beaksedge	\$2	Forest Watch	Rocky Mountain, Cascade, and Alaska ranges in Alaska, British Columbia, Alberta, Washington, Oregon, Montana, and Idaho (CPNWH 2019).	Sphagnum bogs and peatlands from 2,000 to 6,000 feet (Forest Service 2015).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.

Scientific Name	Common Name	State Rank	Status	Species Range	General Habitat Information	Populations ¹ and Past Surveys in Analysis Area ²
Sanicula graveolens	Sierra sanicle	S1	Forest Watch	Rocky Mountain, Cascade, and Coastal ranges in British Columbia, Washington, Oregon, Montana, Idaho, and California (CPNWH 2019).	Open or lightly wooded slopes or flats. Found on both granitics and basalts from 2,000 to 6,500 feet (Forest Service 2015). Subalpine fir zone in open granitic soils from 5,500 to 7,500 feet elevation known from Brundage Mountain area (Forest Service no date). Open forest or rocky slopes, occasionally serpentine (Jepson eFlora 2018).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.
Saxifraga tolmiei var. ledifolia	Tolmie's saxifrage	SNR	Sensitive	Rocky Mountain, Alaska, Cascade, and Sierra Nevada ranges in Alaska, British Columbia, Washington, Oregon, Idaho, Montana, and California (CPNWH 2019).	Arctic and alpine tundra, fell-fields; 1,640 to 13,100 feet. Hazard Lakes in Idaho County (Hitchcock and Cronquist 1973; NatureServe 2018).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.
Scheuchzeria palustris	Rannoch- rush	S2	Forest Watch	Rocky Mountain, Alaska, and Cascade ranges in Alaska, Yukon, British Columbia, Washington, Oregon, Idaho, and Montana (CPNWH 2019).	Sphagnum bogs and peatlands (Forest Service 2015). In full sun on sphagnum bogs (NatureServe 2018).	A population of this species occurs in the Mud Lake area (Forest Service 2018; IDFG 2004). This species has not been included in past special status plant surveys for the Project.
Sedum borschii	Borsch's stonecrop	S2	Forest Watch	Rocky Mountain Range in Idaho and Montana; Cascade Range in Oregon (CPNWH 2019).	Rock outcrops from Ponderosa pine zone to subalpine fir from 1,500 to 7,500 feet elevation in Adams and Valley county on the PNF (Forest Service no date). Cliffs and rocky slopes on a variety of rocks, sites which are too hot and dry for trees; 3,900 to 7,200 feet (Flora of North America 1993+).	A single historical population of this species occurs in the Analysis Area. This species has not been included in past special status plant surveys for the Project.

Scientific Name	Common Name	State Rank	Status	Species Range	General Habitat Information	Populations ¹ and Past Surveys in Analysis Area ²	
Sedum leibergii	Leiberg stonecrop	S2	Forest Watch	Rocky Mountain Range in Idaho and Montana; eastern Cascade Range in Washington and Oregon (CPNWH 2019).	Cliffs and rocky slopes with west-northwest aspect. Often with Douglas fir, 5,000 to 9,000 feet (Forest Service 2015). Open or largely bare areas, basalt or limestone, rocky hillsides, cliffs; 160 to 3,900 feet (Flora of North America 1993+).	No known populations in the Analysis Area. This species has not been included in past special status plant surveys for the Project.	
Triantha occidentalis ssp. brevistyla	Short-style tofieldia	S1	Sensitive, Forest Watch	Rocky Mountain, Alaska, Cascade, and Coastal ranges in Alaska, Yukon, British Columbia, Washington, Oregon, and Idaho (CPNWH 2019).	Wet meadows, streambanks, and peatlands, marshes. Sea level to 7,900 feet (Forest Service 2015, no date). Wet meadows, stream courses and bogs in the subalpine fir zone at elevations from 5,000 to 7,000 feet along Warren Wagon Road (Flora of North America 1993+).	Service in the Analysis Area. This species has not been included in past	

Table Source: Refer to AECOM 2020 for rationale used in determining presence or absence of potential habitat for species in the analysis area.

Table Notes:

- S = State rank indicator; denotes rank based on status within Idaho.
- 1 = Critically imperiled because of extreme rarity or because some factor of its biology makes it especially vulnerable to extinction (typically 5 or fewer occurrences).
- 2 = Imperiled because of rarity or because other factors demonstrably make it very vulnerable to extinction (typically 6 to 20 occurrences).
- 3 = Rare or uncommon but not imperiled (typically 21 to 100 occurrences).
- H = Historical occurrence (i.e., formerly part of the native biota; implied expectation that it might be rediscovered or possibly extinct).

NR = Not ranked.

¹ Location data for species occurrences was derived from Forest Service GIS data (Forest Service 2018)

² Refers to past Project-related surveys performed by contractors for the Proponent in 2012, 2013, and 2014 (HDR 2013, 2014, 2017). Surveys for species included in this table are required prior to Project activities as per BNF and PNF Forest Standard BTGU01.

Table H-3-2 Acres of Modeled Potential Habitat for Sensitive and/or Forest Watch Plant Species in the Analysis Area

Scientific Name	Common Name	Guild for Section 4.10 Analysis	Acres of Modeled Habitat in Analysis Area	Modeled Habitat in Analysis Area (AECOM 2020)
Allotropa virgata	Candystick	Upland Forested or Shrubland	498.6	Near the mine site, the transmission line route, Burntlog Route, Warm Lake Road (CR-10-579), Cabin Creek Road (FR 50467), and Johnson Creek Road (CR-10-413).
Astragalus vexilliflexus var. vexilliflexus	Bent-flowered milkvetch	Exposed Substrate or Sparsely Vegetated	87.3	Near the mine site, the transmission line route, and Meadow Creek Lookout Road (FR 51290).
Botrychium crenulatum	Scalloped moonwort	Wet Meadow, Fen, Open Water, and/or Seeps/Springs	84.4	Along Johnson Creek Road (CR-10-413), Burntlog Route, Stibnite Road (FR 50412), the transmission line corridor, and the mine site.
Botrychium lineare	Slender moonwort	Wet Meadow, Fen, Open Water, and/or Seeps/Springs	1,209.6	Along Warm Lake Road (CR-10-579), Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Burntlog Route, Stibnite Road (FR 50412), the transmission line route, and the mine site.
Botrychium simplex	Least moonwort	Wet Meadow, Fen, Open Water, and/or Seeps/Springs	1,209.6	Along Warm Lake Road (CR-10-579), Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Burntlog Route, Stibnite Road (FR 50412), the transmission line route, and the mine site.
Bryum calobryoides	Beautiful Bryum	Exposed Substrate or Sparsely Vegetated	108.5	Along Stibnite Road (FR 50412), Johnson Creek Road (CR-10-413), Burntlog Route, and Warm Lake Road (CR-10-579).
Buxbaumia viridis	Green bug moss	Upland Forested or Shrubland	443.2	Along Warm Lake Road (CR-10-579), Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Stibnite Road (FR 50412), and at the mine site.
Calamagrostis tweedyi	Cascade reedgrass	Upland Forested or Shrubland	5,015.0	Along Warm Lake Road (CR-10-579), Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Burntlog Route, Stibnite Road (FR 50412), the transmission line route, and the mine site.
Carex livida	Livid sedge	Wet Meadow, Fen, Open Water, and/or Seeps/Springs	957.4	Along Warm Lake Road (CR-10-579), Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Burntlog Route, Stibnite Road (FR 50412), the transmission line route, and the mine site.

Scientific Name	Common Name	Guild for Section 4.10 Analysis	Acres of Modeled Habitat in Analysis Area	Modeled Habitat in Analysis Area (AECOM 2020)
Carex straminiformis	Shasta sedge	Exposed Substrate or Sparsely Vegetated	930.6	Along Burntlog Route, Old Thunder Mountain Road (FR 440), Meadow Creek Lookout Road (FR 51290), the transmission line route, and the mine site.
Cicuta bulbifera	Bulblet-bearing water hemlock	Wet Meadow, Fen, Open Water, and/or Seeps/Springs	188.3	Along Warm Lake Road (CR-10-579), Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Stibnite Road (FR 50412), the transmission line route, and the mine site.
Douglasia idahoensis	Idaho douglasia	Exposed Substrate or Sparsely Vegetated	137.6	Along Burntlog Route, Meadow Creek Lookout Road (FR 51290), the transmission line route, and the mine site.
Draba incerta	Yellowstone draba	Exposed Substrate or Sparsely Vegetated	433.6	Along Burntlog Route, Meadow Creek Lookout Road (FR 51290), Old Thunder Mountain Road (FR 440), the transmission line route, and at the mine site.
Drosera intermedia	Spoonleaf sundew	Wet Meadow, Fen, Open Water, and/or Seeps/Springs	957.4	Along Warm Lake Road (CR-10-579), Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Burntlog Route, Stibnite Road (FR 50412), Meadow Creek Lookout Road (FR 51290), Old Thunder Mountain Road (FR 440), the transmission line route, and the mine site.
Epilobium palustre	Swamp willow weed	Wet Meadow, Fen, Open Water, and/or Seeps/Springs	100.4	Along Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Burntlog Route, Stibnite Road (FR 50412), the transmission line route, and at the mine site.
Epipactis gigantea	Giant helleborine orchid	Wet Meadow, Fen, Open Water, and/or Seeps/Springs	140.8	Along Warm Lake Road (CR-10-579), Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), and Stibnite Road (FR 50412).
Helodium blandowii	Blandow's helodium	Wet Meadow, Fen, Open Water, and/or Seeps/Springs	738.0	Along Warm Lake Road (CR-10-579), Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Burntlog Route, Stibnite Road (FR 50412), the transmission line route, and at the mine site.
Hierochloe odorata	Sweetgrass	Wet Meadow, Fen, Open Water, and/or Seeps/Springs	952.4	Along Warm Lake Road (CR-10-579), Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Burntlog Route, Stibnite Road (FR 50412), the transmission line route, and at the mine site.

Scientific Name	Common Name	Guild for Section 4.10 Analysis	Acres of Modeled Habitat in Analysis Area	Modeled Habitat in Analysis Area (AECOM 2020)
Lewisia sacajaweana	Sacajawea's Exposed Substrate or Sparsely Vegetated		3,260.5	Along Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Burntlog Route, the transmission line route, and the mine site.
Mimulus clivicola	Bank monkeyflower	Wet Meadow, Fen, Open Water, and/or Seeps/Springs	427.3	Along Warm Lake Road (CR-10-579), Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Burntlog Route, the transmission line route, and the mine site.
Penstemon laxus	Tufted penstemon	Upland Forested or Shrubland	408.3	Along Warm Lake Road (CR-10-579), Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Stibnite Road (FR 50412), and at the mine site.
Pinus albicaulis	Whitebark pine	No guild- analysis is stand-alone.	6,129.0	Along Warm Lake Road (CR-10-579), Cabin Creek Road (FR 50467), Burntlog Route, Meadow Creek Lookout Road/FS 1290 (FR 51290), the transmission line right-of-way, and the mine site.
Polystichum kruckebergii	Kruckeberg's Sword-fern	Exposed Substrate or Sparsely Vegetated	1,210.7	Along Warm Lake Road (CR-10-579), Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Burntlog Route, the transmission line route, and the mine site.
Rhynchospora alba	White beaksedge	Wet Meadow, Fen, Open Water, and/or Seeps/Springs	432.1	Along Warm Lake Road (CR-10-579), Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Stibnite Road (FR 50412), the transmission line route, and the mine site.
Sanicula graveolens	Sierra sanicle	Exposed Substrate or Sparsely Vegetated	1,182.2	Along Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Burntlog Route, the transmission line route, and the mine site.
Saxifraga tolmiei var. ledifolia	Tolmie's saxifrage	Exposed Substrate or Sparsely Vegetated	875.6	Along Warm Lake Road (CR-10-579), Johnson Creek Road (CR-10-413), Burntlog Route, the transmission line route, and the mine site.
Scheuchzeria palustris	Rannoch-rush	Wet Meadow, Fen, Open Water, and/or Seeps/Springs	957.4	Along Warm Lake Road (CR-10-579), Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Burntlog Route, Stibnite Road (FR 50412), the transmission line route, and the mine site.
Sedum borschii	Borsch's stonecrop	Exposed Substrate or Sparsely Vegetated	99.4	Along Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Stibnite Road (FR 50412), the transmission line route, and the mine site.

Scientific Name	Common Name	Guild for Section 4.10 Analysis	Acres of Modeled Habitat in Analysis Area	Modeled Habitat in Analysis Area (AECOM 2020)
Sedum leibergii	Leiberg stonecrop	Exposed Substrate or Sparsely Vegetated	99.4	Along Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Stibnite Road (FR 50412), the transmission line route, and the mine site.
Triantha occidentalis ssp. brevistyla	Short-style tofieldia	Wet Meadow, Fen, Open Water, and/or Seeps/Springs	755.0	Along Warm Lake Road (CR-10-579), Cabin Creek Road (FR 50467), Johnson Creek Road (CR-10-413), Burntlog Route, Stibnite Road (FR 50412), the transmission line route, and the mine site.

Table Source: Refer to AECOM 2020 for rationale used in determining presence or absence of potential habitat for species in the analysis area.

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